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THE PROGRESS OF THE WORLD.

A Languid Political Season.

With Congressional elections pending, and State campaigns on foot in many of our commonwealths, the people of the United States, nevertheless, were evidently much more interested last month in other things than they were in party politics. As we have frequently remarked, this country is fortunate enough at present not to be greatly distracted by those bitter prejudices and fierce rivalries of party—amounting almost literally to warfare—that are inevitable certainly at periods in a nation's career, but that ought not to be perpetual. Nothing could be more obvious than that the country is well satisfied with President Roosevelt's conduct during his first twelve months as Chief Magistrate. It will be one year, on the 14th of the present month, since President McKinley's tragic death at Buffalo, and the administering of the oath of office to his successor. Mr. Roosevelt has fulfilled all reasonable expectations. He has shown marvelous adaptability in every direction, has given untiring industry to the varied details of his great office, and has borne the strain with unflinching physical vigor and imperturbable good temper.

A Year of Roosevelt.

He has stood strongly for the policies which he believed to be wise and right for the country, without any sacrifice of agreeable personal relations with all the leaders of his own party, and, in fact, with all public men of whatever affiliation. His appointments have been felicitous, and, in general, highly praised. He holds the good will of the Democratic South almost as completely as of the Republican Northwest. He is *persona grata* in New England, and is idolized west of the Missouri River. He maintains good relations with the party leaders of New York and Pennsylvania, and has the hearty approval of the plain people of those great States. That he will be renominated in 1904 is now considered to be even more probable than was Mr. McKinley's renomination in the middle of his first

term. Never, indeed, since the early days of the Republic has it appeared so likely that a President would be his own successor. This, of course, in a sense pertains to 1904 rather than to 1902. But it is well to appreciate the fact that this remarkable popularity of the President, and this quite general approval of the administration as a whole, form a very important element in the political atmosphere that surrounds the electoral situation this fall. The politicians have their own all-powerful reasons for partisan effort; but people at large, being pretty well satisfied with things as they are, and having no political objects of their own at stake, are rather indifferent than otherwise, through sheer contentment and preoccupation. The great Republican argument of the year will be the advisability of letting well enough alone. It would be strange if the Democratic party should not regain something of its normal strength in Congress; but it is scarcely to be believed that the pendulum will swing so far back as to put the opposition party in control of the House.

Bumper Crops and Prosperity.

Next to the widespread feeling of confidence in President Roosevelt and the administration, the best reliance of the Republicans for success this year will lie in the marvelously prosperous state of our agriculture and industry. It is now certain that the crops of 1902 are to exceed in quantity and value those of any previous year in our history. Last year the corn crop, which was a partial failure, amounted to 1,522,500,000 bushels, the average of the ten preceding years having been about 2,000,000,000 bushels. Last year, therefore, the corn crop was only three-quarters of the normal yield. This year it is admitted on all hands that the crop will be at least 1,000,000,000 bushels greater than last year, and *Bradstreet's* declared in the middle of August that "there is a prospect of 1,250,000,000 more bushels of corn being raised than a year ago." In our judgment, it is not at all unlikely that the corn crop may

exceed 2,800,000,000 bushels. Much the largest previous corn crop was that of 1896, which amounted to a little less than 2,284,000,000 bushels. Last year's corn brought a high price, so that those farmers who were fortunate enough to have a crop made a great deal of money. But it needs little demonstration to make it plain that a generally abundant yield at lower prices contributes more to the general prosperity than a scanty yield at proportionately high prices. One of the results of a billion bushels of extra corn must be to lower the price of meat. The defense of the great beef-supply companies against the charges of extortionate prices has been the shortage of the corn crop. This excuse now disappears, and the retail butchers ought before long to be obtaining their stock at the old prices.

The smaller corn crop of last year was counterbalanced by the extraordinary yield of wheat, much the greatest on record. The wheat crop of 1901 amounted to nearly 750,000,000 bushels. Four hundred and fifty million bushels has generally been considered an average American wheat crop. Only twice before last year had the crop exceeded 600,000,000,—namely, in 1891, when it was 612,000,000, and in 1898, when it was



IN THIS WHEAT BY AND BY!
(Expectant Europe and the American harvest.)
From the *Inquirer* (Philadelphia).

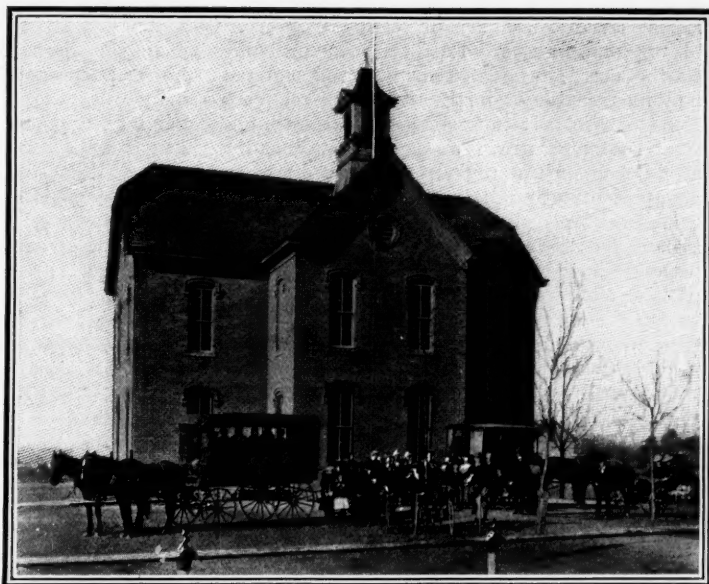
675,000,000. In 1899 it was 547,000,000, and in 1900 a little more than 522,000,000. The New York *Times* last month, rejecting the Government estimates of this summer's wheat yield, was of the opinion that it might be nearly or quite as great as that of last year. A contributor to this number of the *Review*, Mr. William R. Draper, estimates it at fully 700,000,000 bushels, which we do not believe at all too high. Improved methods of farming in the United States have made wheat both a surer and a more prolific crop than it was some years ago. Like corn, it enters importantly into the agricultural production of nearly all the States. The crop is divided about evenly between winter and spring wheat. Northern Texas now grows wheat in abundance.

The South was busily engaged last month in picking, baling, and marketing the new cotton crop. Early in the season the prospects had been favorable for the largest and finest crop ever grown. Considerable damage was done in some localities, as the crop was maturing, by unfavorable conditions of weather. But with reports and estimates somewhat conflicting as these comments were written, there was a chance that the output might reach almost 12,000,000 bales, as against an average for the previous four years of about 10,500,000. Our Southern cotton crop has doubled in twenty years, thus showing a very much larger relative gain than the wheat and corn of the West, each of which has, roughly speaking, increased by about 50 per cent. in two decades.

These three great crops by no means exhaust the list of those products which make up our current agricultural wealth. The oat crop of 1902 is the largest we have ever had, and may amount to from 850,000,000 to 900,000,000 bushels. And although this particular cereal is not enough in demand to justify a vast increase of acreage, we shall, doubtless, within two or three years, be producing an average of a thousand million bushels of oats per year. The barley crop is estimated at about 120,000,000 bushels, as against an average for some years past of perhaps 70,000,000. The volume and value of pasturage and hay are more difficult to estimate than some of the other crops, but undoubtedly these have been considerably greater this year than ever before. The grass crop for the most part finds its way to the market in the form of dairy products, wool, beef and mutton, hogs, horses, and mules. The number of farm animals and the value of marketable animal products of the farm have increased by about 100 per cent. in twenty years.

We publish else-
Intelligence and Prosperity. where some in-
 teresting agricul-
 tural statistics compiled by
 Mr. William R. Draper, en-
 titled "The Farmer's Balance
 Sheet for 1902," and a brief
 article on "The Diffusion of
 Agricultural Prosperity,"
 from the pen of the distin-
 guished political economist,
 Prof. Henry C. Adams, of the
 University of Michigan. Prof.
 Adams' analysis will bear
 very careful study, for it
 contains some profound
 underlying truths. Nothing
 could be a greater mistake
 than to take a purely materi-
 alistic view of the prevalence
 of prosperity in the United
 States at the present time.
 Moral and intellectual condi-
 tions, forming the essence of
 our civilization, are at the
 basis of all this agricultural
 development and industrial
 progress. The growth and
 diffusion of wealth in the
 United States would have
 been absolutely impossible
 but for the maintenance of
 our democratic ideals. The
 value is not, after all, in
 the crops, but in the man
 who produces them, who
 owns the land, who receives
 the income, and who ex-
 pends it for the advance-
 ment of himself and his
 family in rational ways,
 that also benefit the
 neighborhood and the
 country. Intelligence is
 what makes American
 farming prosperous. We
 beg to call attention to
 another article in this
 number of the REVIEW
 from a Western contributor,
 Mr. Matson, on "Improved
 Conditions in the Ameri-
 can Farmer's Life." With
 mortgages paid off, and a
 sense of freedom and pros-
 perity, the typical farmer
 of the West is asserting
 his rightful place as the
 proprietor of an estate
 and as a well-established
 citizen of a great country.
 He is improving his
 farm buildings; grading
 up his live stock; learn-
 ing from the authorities
 of his State agricultural
 college and from the
 Farmers' Institute of
 his county more and
 more about scientific
 agriculture; and provid-
 ing for his family more
 and more of the luxuries
 of life that are enjoyed
 by the banker and the
 successful merchant or
 professional man in the
 county town.

Improving Neighborhood Life. The farmer is, furthermore, as Mr. Matson shows, turning his attention to the improvement of neighborhood conditions, so that country life may not be too



A TYPICAL CONSOLIDATED COUNTRY SCHOOL, SHOWING WAGONS FOR TRANSPORTING PUPILS. THIS ONE IS IN INDIANA.

irksome for his children. While free rural delivery of the mails is by no means universal as yet, the telephone is found in almost every farming neighborhood of the country. What Mr. Matson says about the progress of the movement for consolidating country schools is worthy of attention; and this is a subject to which we shall in future numbers of the REVIEW recur with particular attention and emphasis, for it is a matter of profound significance. In the towns there have been vast strides during the last quarter of a century in public-school equipment and instruction, while until very lately the old-fashioned district schools of the rural neighborhoods had been either at a standstill or were positively retrograding. Under the new impulse there is to be not merely a radical, but a revolutionary change in country schools. The diminutive "red schoolhouse" of the North and the log-cabin school of the South have about served their day. Something vastly better and more modern is easily within reach of thousands of rural neighborhoods.

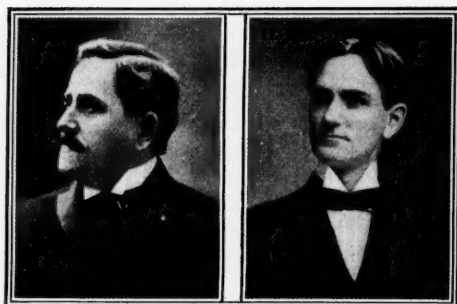
The new mandate that has gone forth
Consolidating Rural Schools. is to the effect that neighboring districts must consolidate in order to build a good central school building, with several rooms and several teachers, and a consequent opportunity for grading the scholars. It is further decreed that the children must be brought to this central school on a coöperative plan, in

suitable conveyances for protection from cold and wet and fatigue. Further, it is in the air that the new consolidated country school must adapt its methods of instruction to the real conditions of life. It must be a social and intellectual center for grown-up people as well as for the children of the region. It must have an ample piece of ground, and this must be kept in the most perfect order, as one of the primary interests and duties of the school. Nature-study must enter largely into school life and work, and a positive taste for rural pursuits and for the elements of the natural sciences must be inculcated. The school grounds must furnish object lessons in the planting and maintenance of trees and flowers, and, in so far as possible, may well be utilized to teach practical gardening. A certain amount of manual training for both girls and boys should enter into the work of the school, and every neighborhood should strive to surpass all others in its zeal to secure good teachers by offering proper inducements.

*New
Educational
Enthusiasm.*

Instances of precisely this sort of school development are fortunately no longer isolated. Great educational leaders and official heads of school systems, including some of the foremost State superintendents of education, are making themselves the zealous and eloquent apostles of this new movement for the regeneration of country schools. The Southern Education Board, under the presidency of Mr. Robert C. Ogden, of New York,—with its membership largely made up of Southern professional educators,—backed financially in its work by the General Education Board of New York, is making this movement for the improvement of rural schools the object of its chief solicitude. It has been going about

its work in various ways. First, it has been leading a propaganda for local taxation for school purposes; second, it has stimulated in many ways the work of institutions which are training teachers; and, third, it has in various instances directly promoted district-school consolidation. These objects were held constantly before the attention of the great summer school for teachers held in June and July at Knoxville, Tenn., where it enjoyed the hospitality of the State University. It was organized by President Charles W. Dabney of that institution, in association with Professor Claxton, recently

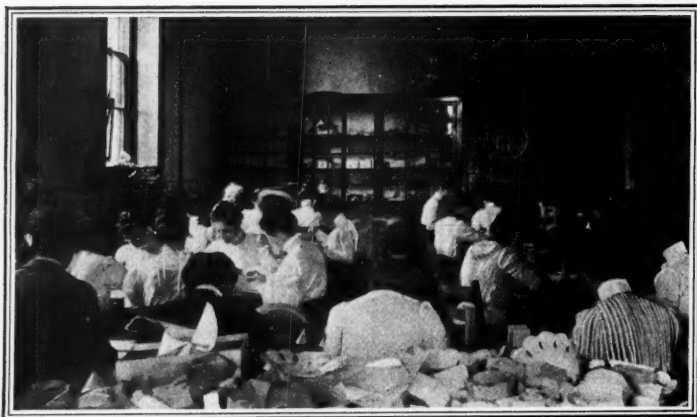


President Dabney.

Professor Claxton.

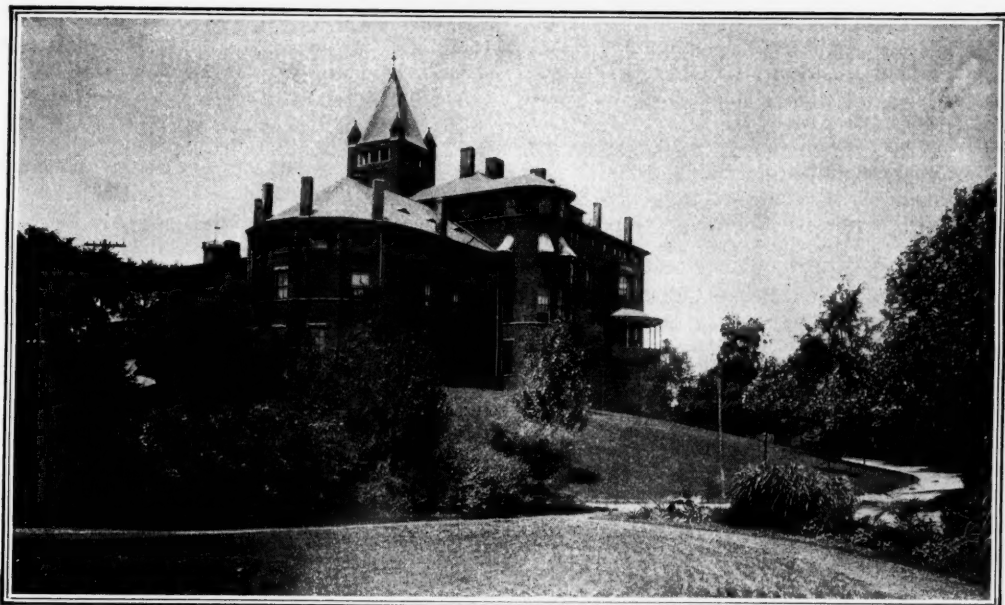
ORGANIZERS OF THE SUMMER SCHOOL OF THE SOUTH.

of North Carolina, who is henceforth to be the head of the department of education in the University of Tennessee. The enthusiasm for bettering the condition of the South through educational progress, as manifested in this summer school, was, by report of many expert witnesses, a fresh evidence that in the South, as well as in the West, education is now coming to be recognized as the most important of all public interests and the chief task of local statesmanship. This is very auspicious.



A CLASS IN MANUAL TRAINING, SUMMER SCHOOL AT KNOXVILLE.

More than two thousand teachers came together at this great summer school at Knoxville, and a great number of able instructors were assembled. The General Education Board has been so impressed with the extraordinary value of this work that it has promised a generous contribution toward its enlargement next year. As we have already remarked, manual training, consolidation of country schools, and the



THE SCIENCE HALL OF THE UNIVERSITY OF TENNESSEE.

thorough adaptation of school work to actual problems and conditions were constantly emphasized at Knoxville, and President Dabney is one of the foremost exponents of these modern views to be found in the entire country. While this summer school at Knoxville was undoubtedly the center for the country, this summer, of enthusiasm for rural civilization and progress in the half of the country that most needs school reform, it should not be forgotten that an admirable summer school for Virginia teachers was carried on at the University of Virginia, at Charlottesville, with nearly a thousand members enrolled; that South Carolina had an excellent summer school for teachers at Rock Hill, with leadership of great earnestness, and that several more strictly local assemblages of teachers were in session for a period of several weeks in North Carolina, Alabama, Louisiana, and other Southern States. The great summer schools of the North,—as, for example, those held by Columbia University, Harvard, and the University of Chicago,—have had prosperous seasons, and these, together with the Chautauqua assemblies and other conferences and gatherings of an educational nature, have added something to the training and much to the ideals and inspiration of many thousands of Northern and Western teachers. But, generally speaking, it is the well-paid teacher of the towns and more prosperous villages who can afford to attend these fine summer schools. For New York, Pennsylvania,

New England, and the North in general, the problem of the country school must be faced, as unquestionably it will be, with ever-increasing comprehension of its importance. Meanwhile, in the Northern cities the vacation schools have made much progress in this past summer.

Platforms of the Teaching Profession. The great yearly convention of the National Educational Association, which was held at Minneapolis in July, seemed to us to touch high-water mark in its appreciation of the vital needs of our schools, and in its consciousness of the duty and opportunity of the teaching profession. In its series of general resolutions it declared that the common schools of this country "are the one great agency upon which the nation is to rely for a barrier against the setting up of 'class distinctions which have no place on American soil.'" Having expressed its ideal of the "complete education of the child," it declared as follows concerning the country schools:

We believe that it is both just and possible to keep the country schools in the foregoing, and all respects, up to the highest standard of excellence and efficiency. The movement to consolidate the weaker districts in the country, and to provide public and free transportation for the pupils to and from the schools, tends to that end.

It made other declarations in consonance with the new movement for vitalizing school life and work, and bringing it all into direct relation with

the moral and material welfare of the community. The Summer School of the South at Knoxville, to which we have referred, in its declaration of principles included the following sentences, which seem to us to sound the keynote of the new school movement not merely for the South, but for the whole country :

If an increased expenditure of money is to be of lasting value, a more intelligent public interest must be brought to bear upon our schools. But even greater than the need of money and interest is the need of intelligent direction.

A mere extension of the present school term with the present course of study will not meet the needs of the children. The lines of development in the South must be both agricultural and mechanical. Our people must bring a trained brain and a trained hand to the daily labor. Education should be a means not of escaping labor, but of making it more effective.

The school should be the social center of the community, and should actively and sympathetically touch all the social and economic interests of the people. In addition to the usual academic studies, therefore, our courses should include manual training, nature study, and agriculture.

To secure more efficient supervision, to encourage grading, and to broaden the social life of the children, we favor the consolidation of weak schools into strong central schools. It is better in every way to carry the child to the school than to carry the school to the child. We endorse the movements recently made by the women of the South for model schools, built with due regard to sanitation, ventilation, and beauty.

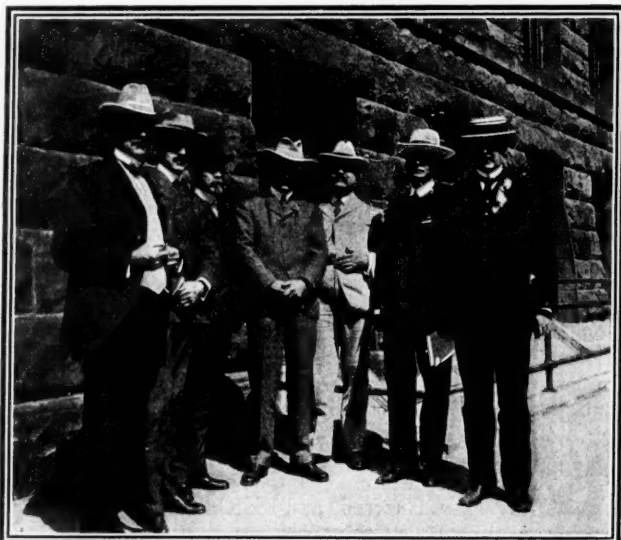
Teaching should be a profession, and not a stepping-stone to something else. We therefore stand for the highest training of teachers, and urge the school authorities of every State to encourage those who wish to make the educating of children a life profession. We call upon the people to banish forever politics and nepotism from the public schools, and to establish a system in which, from the humblest teacher to the office of the State superintendent, merit shall be the touchstone.

The South will have a great work on its hands if, indeed, it is to make good the brave determination of its new educational apostles; but its school reforms are in the hands of men who have earned the right to lead, and who have already won the prestige of success in their individual undertakings.

Thus the prevailing European idea that American life is synonymous with greed and Mammon worship, and that the superior prosperity of the United States expresses it-

Ideals of American Life.

self chiefly in the gratification of physical wants and material aims, is as untrue to the facts as could well be. Mr. Michael Sadler, who is director in the British Education Department, has recently spent several months in studying educational work in this country, and he repeatedly expressed his admiration and astonishment at the comparative devotion of the United States to intellectual and moral objects, and especially at the unprecedented development of educational work of all grades. An occasional visitor of great insight, like Mr. Sadler or Mr. Bryce, discovers the paradox of American life, which is that the abounding material prosperity of this country has grown out of its idealism,—its search for things not material. Russia has a vast population and a tremendous agricultural area, but its people lack the intelligence needed to develop their resources. American devotion to the principles of equality and democracy, and to the policy of the universal training of the young, have given us our prosperity. We must, in turn, make it more than ever our business to utilize our abounding material resources for the more perfect and more complete work of adapting school training to the needs of every child.



A SNAPSHOT OF MR. MICHAEL SADLER, WITH DISTINGUISHED AMERICAN EDUCATORS AT THE RECENT MINNEAPOLIS MEETING OF THE NATIONAL EDUCATIONAL ASSOCIATION.

(Beginning at the left hand, the seven men are: 1. Aaron Gove, superintendent of schools, Denver, Col.; 2. Edwin A. Alderman, president of Tulane University; 3. E. O. Lyte, principal of the State Normal School, Millersville, Pa.; 4. Nicholas Murray Butler, president of Columbia University; 5. John A. Green, manager of the American Book Company; 6. Michael E. Sadler, of England; 7. N. C. Dougherty, superintendent of schools at Peoria. Messrs. Gove, Lyte, Butler, and Dougherty have each served as president of the National Educational Association.)

*Decline of
Partisanship.*

Communities, whether rural or urban, that are engaged in advancing these local measures for the common good, may well be a trifle reluctant to drop it all at the beck and call of the politicians, and to separate for the electoral season into rival camps under the standards "Republican" and "Democrat." Efficiency, rather than partisanship, seems to be the demand of the day. Thus, Massachusetts approves of Governor Crane and his administration as thoroughly as possible,—not so much because he happens to be a Republican as because he has shown himself a thoroughly upright, business-like, and capable governor of Massachusetts, in whose hands the executive affairs of the commonwealth are so honorably and so ably conducted that everybody admires and nobody finds fault. In New York, Governor Odell has so carried on his administration that many of his strongest supporters belong to the class of independent voters. He has been business-like, and, so far as we know, the Democrats are not really finding any serious fault with him. They are trying to harmonize their factions and find a candidate upon whom all can unite, chiefly because it is their business as politicians to hold the party together for the sake of the future. They will, nevertheless, undoubtedly recognize the spirit of the period by selecting a candidate who, like Mr. Odell, will commend himself to the judgment of the community as an efficient man, and who, if elected, would carry on State affairs in a business-like rather than a partisan manner.

*What are
the Party
Issues?*

Local issues of various sorts are quite sure, under these circumstances, to play a larger part than usual in the political campaigns of the present season throughout the country. It is not very easy to find an intelligent man who, in friendly, private conversation, can at present show any great zeal of partisanship. The war with Spain was as much the work of one party as of the other, and the ratification of the treaty by which we acquired the Philippines was not wholly a Republican act. Whatever distinctions certain learned individuals may make, the country as a whole will not now find it easy to make any sharp issue between the parties out of existing differences of opinion as to our present Philippine policy. Some of the Democrats say that we ought to declare to the Filipinos that we intend in the future to give them self-government; but the Republicans reply that we are actually giving them self-government just as fast as it can be forced upon them, and that when you are doing your best to teach a child to walk, there is no particular use in proclaiming to him daily that he shall some time be permitted to

run. Nor will the country be likely to find any radical difference between the parties as respects such a question as how to deal with trusts and great combinations. Experience and study, observation and discussion, are giving us a clearer understanding of these problems every day. Meanwhile, there is no great divergence in the avowals of the two parties on the trust question, and certainly President Roosevelt and the Attorney-General have not hesitated to attempt the enforcement of existing laws. Nor, finally, is there much use in trying any longer to make the tariff question the football of politics. Business men of all parties and all sections arise in their might and demand that the tariff issue serve no longer as a mere party convenience. When the Democratic politicians had their opportunity to reform the tariff a decade ago, they modified it a little here and a little there, but they left it in general what it was before,—namely, a characteristic American high protective tariff. If they were given the opportunity again in the near future, they would mutilate the Dingley schedule a good deal, no doubt; but when they got through, there would remain an American protective tariff. Meanwhile, however, there would have been agitation and uncertainty, with the consequence that various important industries would curtail operations, and with harmful indirect effects extending throughout the business life of the country.

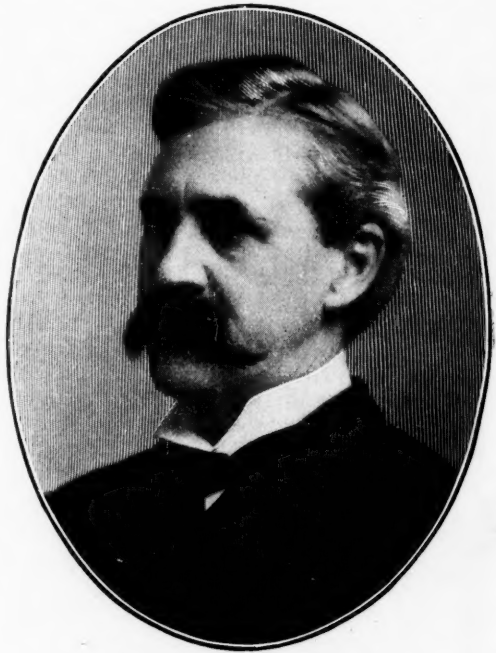
*Should the
Tariff be
Revised?*

Yet the present tariff is by no means the best that could be devised. The principal thing in its favor is the fact that business conditions have adjusted themselves to it, that the Treasury Department understands its qualities as a producer of revenue, and that the reasons for disturbing it are of a general nature rather than practical, specific, and immediately urgent. On the other hand, it is a simple fact that American industrial development has reached that condition of maturity to promote which the protective system was originally devised. We are becoming a great exporting nation, and foreign countries are growing more and more uneasy and disturbed over the invasion of their markets by American goods, while this country keeps up its high barriers against foreign commodities. Furthermore, some at least of our protected industries,—like tin plate, for example,—have passed under the control of a partial or almost complete monopoly; and in these cases; it is urged, tariff protection should be considerably reduced, if not altogether withdrawn. The fact is, that the American wage system is no longer dependent chiefly upon the tariff, but upon the efficiency of labor in actual

production. President McKinley, the great apostle of protection, had arrived at the opinion that the time had fully come for a modification of our policy. His last speech at Buffalo was a plea for enlarged commercial relations through a system of reciprocity treaties. Free trade with Cuba and the Philippines would be a good starting point, and reciprocity amounting practically to a zollverein, or commercial union, between the United States and Canada might prove to be an act of the most far-reaching statesmanship. A revision of the iron and steel schedules would not hurt this highly developed American industry, and the same thing might be said of several other schedules. Republican business men in almost every community of the country would like to see some conservative modification of the tariff, provided it could be done without political agitation and clamor, and provided certain members of the United States Senate would not take advantage of the rules of that body to prevent conclusions by interminable debate.

Republican Opinion in the Northwest. This feeling among Republicans was expressed very strongly in the Iowa State convention a month ago. The platform, as finally adopted, was the same one which had done service in the State campaign of 1901. There was, nevertheless, a good deal of opposition to it this year, led chiefly by the influential gentlemen who represent Iowa in Con-

gress. These men had naturally become imbued with the idea that, as a practical matter, any change of the tariff is a difficult thing to bring about, and with the further view—prevailing in conservative Republican circles at Washington—that present conditions do not justify a reopening of the tariff question. Governor Cummins, on



GOV. ALBERT B. CUMMINS, OF IOWA.



ON THE IOWA POLITICAL TURNPIKE.

SPEAKER HENDERSON: "Hi there! Clear the track! You're scaring my elephant!"

Gov. CUMMINS: "The elephant'll have to get used to it."

From the *Journal* (Minneapolis).

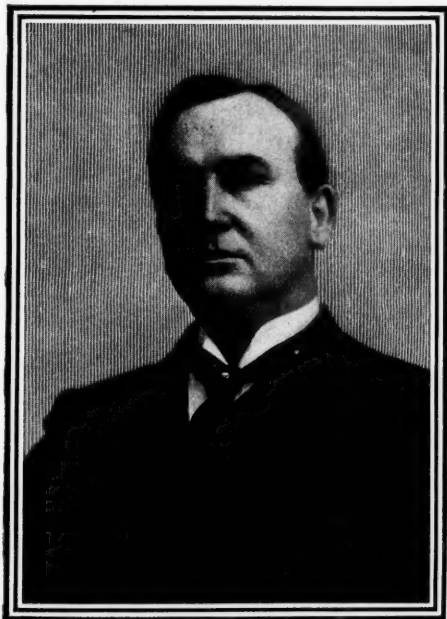
the other hand, supported by local opinion from almost every part of the State, held tenaciously to the view that if the tariff is not soon revised by Republicans in a cautious and friendly way, it will be revised by anti-protectionists in a hostile and radical way. Governor Cummins believes that, although it is only five years since the Dingley tariff was adopted, our industrial conditions have made greater changes in this period than in a preceding term of twenty years. The Iowa platform stands by "the historic policy of the Republican party in giving protection to home industries;" but it favors "such changes in the tariff from time to time as become advisable through the progress of our industries and their changing relations to the commerce of the world." The platform endorses the policy of reciprocity, and favors "any modification of the tariff schedules that may be required to prevent their affording shelter to monopoly." The Iowa Republicans do not mention any particular sched-

ules, nor set any time for action. It is well known that in Wisconsin and several other Northwestern States, there is much the same feeling as in Iowa in favor of conservative tariff revision. Many Republican newspapers throughout the country have commended the Iowa platform, although there seems very slight disposition on the part of any Republican leaders to come forward with more specific suggestions.

The General Party Attitude. Mr. Babcock, of Wisconsin, who is chairman of the Republican Congressional Committee in charge of this year's campaign, has heretofore been exceedingly active in an endeavor to reduce the tariff on articles which enter largely into our exports, or which are controlled in the domestic market by trusts or combinations of capital. But his position at present is one of general defense of the tariff system, as against Democratic attacks upon it led by Mr. Griggs, of Georgia, chairman of the Democratic campaign committee. The Secretary of the Treasury, Mr. Shaw of Iowa, while undoubtedly appreciating the fact that business conditions have grown quite away from the Dingley tariff, does not believe it worth while to agitate the subject now, because he sees no prospect of tariff revision until after the next Presidential election,—unless, indeed, the Republicans



HON. JOSEPH W. BABCOCK, OF WISCONSIN.
(Chairman of the Congressional Republican Campaign Committee.)



HON. JAMES M. GRIGGS OF GEORGIA.
(Chairman of the Congressional Democratic Campaign Committee.)

should be taught quite emphatically in the Congressional elections this fall that the people demand an earlier revision. Undoubtedly, the position now held by such men as Mr. Payne, chairman of the Ways and Means Committee, Speaker Henderson, and Mr. Grosvenor of the House, and Messrs. Hanna, Aldrich, and other influential leaders in the Senate, is that tariff revision ought not to be undertaken by the Congress to be elected this year, but ought to be deferred for its successor, to be chosen in the Presidential year 1904. The Congressional elections will be held under the new apportionment based upon the census of 1900. Under the new apportionment the total membership of the House will be 386, instead of 357, an increase of 29 members. The object of this change was to enable every State to keep at least its present representation. New York, Illinois, and Texas each gain three members, while Pennsylvania, New Jersey, and Minnesota gain two apiece. Fourteen States gain one member each, these States being scattered East, West, North, and South.

The President and an Apportionment of Two. The White House at Washington has been undergoing extensive alterations and repairs, and President Roosevelt has spent as much as possible of the summer at his own permanent home at Oyster Bay, on

Long Island. His plans comprise a twelve days' journey through the New England States, to end on September 3, and a visit to the West to attend soldiers' reunions, and for some other similar objects, beginning on September 19, and



JUSTICE HORACE GRAY, OF MASSACHUSETTS.
(Retiring from the United States Supreme Court.)

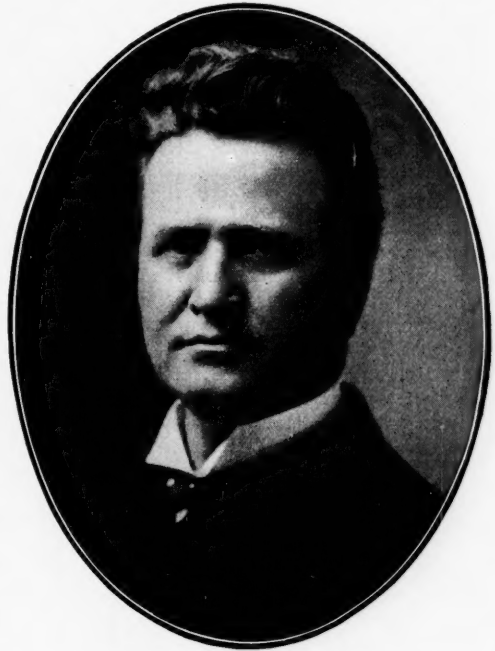
continuing for two or three weeks. With Congress adjourned, and no very critical problems pending, either of domestic or foreign concern, it has been possible for high government officials, from the President and his cabinet down, to relax somewhat through the summer months. There have been no cabinet changes, and no rumors of any. The most important appointment of last month was that of Oliver Wendell Holmes, Chief Justice of the Supreme Court of Massachusetts, as a Justice of the Supreme Court of the United States, to succeed Justice Horace Gray. Several months ago Justice Gray, who is seventy-four years old, was stricken with apoplexy, and it was known that he would not again appear on the bench. Justice Holmes, his successor, has served for twenty years on the bench in Massachusetts, and is sixty-one years old. He is a man of brilliant and varied attainments, and an eminent legal scholar, of a thoroughly independent and modern order of mind. We present elsewhere in this number an interesting sketch of him from the pen of an esteemed contributor,

Mr. Morris. Justice Gray, who now retires, was also Chief Justice of the Supreme Court of Massachusetts when appointed twenty years ago. It has been known for some time that Justice Shiras intended soon to retire from the Supreme Court, and it was authoritatively stated last month that he would resign next spring, having attained the age of seventy years. It was also announced that, with the completion of his three-score and ten years, Dr. Andrew D. White would soon resign as ambassador at Berlin. While no formal announcement was made, it was commonly believed that the position at Berlin would be filled by the transfer thither of some other prominent member of the diplomatic service, those most frequently named being Mr. Charlemagne Tower, now ambassador at St. Petersburg, and Mr. Bellamy Storer, now minister to Spain and recently minister to Belgium. Dr. Andrew D. White is the best known and most conspicuous man in the American foreign service, and his retirement will be much regretted, although his return to the United States will doubtless result in his being drawn into various activities of a literary, educational, and philanthropic nature.

Some Political Personalities. In the domain of political personalities the summer has brought forth little of special note or interest. It is to be said, however, that the emphatic voice of the country regarding the value of the services of Senator Spooner at Washington has had its due weight in Wisconsin. Spooner clubs have been forming all over the State. It is now practically certain that Mr. Spooner will be the Senatorial choice of the Republican members of the new Legislature, without any regard to those qualifications in its endorsement of him that the Republican State platform contains. It does not follow that Governor La Follette's strong support throughout the State has weakened in the least, or that the dominant element of Wisconsin Republicanism is any the less devoted to the projects of tax reform and nomination reform that are set forth in this year's platform; but it begins to see the impropriety of forcing local tests upon a Republican like Senator Spooner, whose duties at Washington have nothing to do with State issues at home. The perennial struggle about Addicks has broken forth with renewed vigor in Delaware, which remains without any representation at all in the United States Senate, through the stubbornness of the Addicks deadlock. The death of that silent but powerful Republican Senator, Mr. McMillan of Michigan, has made a vacancy for which the ex-Secretary of War, General Alger, was much

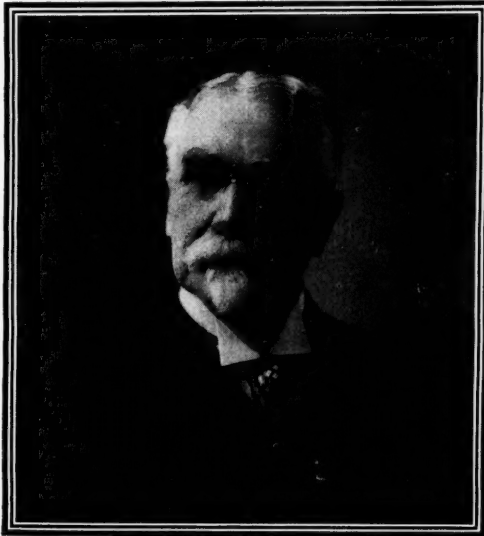
mentioned last month as a willing candidate. The Pennsylvania State campaign has brought Judge Pennypacker, the Republican candidate for governor, into much prominence, and he has been a good deal criticised by the more independent element of Pennsylvania Republicans for his unexpectedly warm and much reiterated eulogies of Senator Quay. It is asserted that this attitude on Judge Pennypacker's part may make votes for his Democratic opponent, ex-Governor Pattison. The Democrats of New York seemed as far as ever last month from agreement upon a candidate for governor. Determined efforts were on foot to reorganize Tammany Hall on an anti-Crocker basis. Mr. Bryan has continued to be the most prominent figure in national Democratic politics, and he has been making visits and public addresses in the East. He has declared plainly that he is not a candidate for renomination in 1904. He has not, on the other hand, said that he would decline a nomination which might come without any seeking on his part. Of Republican leaders, Senator Hanna remains the most conspicuous, apart from the President. If he reads the newspapers, he cannot possibly forget that he is regarded all over the country as a probable Republican nominee in case of conditions,—now improbable and unexpected,—which might take Mr. Roosevelt out of the field. Governor Crane, of Massachusetts, has been brought into added prominence through the report that he will be asked to manage the next national Republican campaign, Senator

Hanna, however, remaining as chairman of the National Committee. Apart from Mr. Bryan, the most conspicuous and promising personalities in the Democratic field seem to be Mayor Tom L. Johnson, of Cleveland, Ohio, and Mr. Edward M. Shepard, of New York. It is entirely possible



GOV. ROBERT M. LA FOLLETTE, WISCONSIN.

that Mr. Bryan might give the weight of his influence to either of these two men in 1904. Judge A. B. Parker, of New York, is another possibility.



THE LATE SENATOR JAMES M'MILLAN, OF MICHIGAN.

Mr. Johnson, by the way, now finds himself at the head of a city government whose charter has been found unconstitutional. A recent decision of the Supreme Court of Ohio has condemned and annulled the many enactments relating to the government of particular Ohio cities which have been in evasion of that clause of the State constitution which requires such legislation to be general rather than special in its application. It was necessary to deal with this situation in a special session of the Legislature; and this was accordingly called late in July by Governor Nash, to assemble at Columbus on August 25. Under the constitution it will be permissible to divide Ohio cities into regular groups or classes, and it will be necessary to adopt a uniform general framework of government for all the cities

Ohio's City
Charters.

that belong in the same class. Ohio has thus an opportunity to benefit by the experience of the rest of the country in municipal government, and it is to be hoped that wise results may accrue from this special session. We believe that experience shows that a very large measure of home rule may well be accorded to the people of our American towns and cities, and that they ought not to be much hampered or restricted in carrying on their affairs and in spending their own money for local improvement. But, above all, it is to be hoped that the Ohio Legislature will be broad-minded enough to adopt such provisions as have been found in practice to aid in the lifting of municipal government out of the ruts of party politics. The National Municipal League, which has for some years past devoted much attention to the reform of municipal charters, and which has a number of influential members in Ohio, has been finding many newspapers of the Buckeye State friendly to its ideas. Its president is the distinguished leader of the bar, Mr. James C. Carter, of New York, and its secretary and executive officer is a well-known young Philadelphia lawyer and politician, Mr. Clinton Rogers Woodruff.

*American
Municipal
Progress.*

Societies like this league, and like the League of American Municipalities (which is an organization of public officials), and the American Park and Outdoor Art Association (which includes in its membership several hundred park commissioners and superintendents, and which recently held a very brilliant annual meeting in Boston), are contributing a very great deal to the advancement of municipal government, and to the improvement and embellishment of our towns. One of the most beautiful and progressive of American municipalities has had the bad luck this year to fall into disgrace through its folly in electing a notoriously unfit man as its chief executive. We refer to Minneapolis, where indictments have followed astounding charges of malfeasance in office, and where the lesson will doubtless be taken to heart and remembered for many years to come. Now that the tendency in American cities is to concentrate authority more and more in the hands of the mayor and a group of department chiefs selected by him, it becomes indispensable that the mayor should be a man of judgment and poise as well as of the highest qualities of personal character. Thus it would be hard to overestimate the value that is accruing week by week to the great metropolis of New York, under its concentrated system of municipal government, from the efficient services of Mayor Seth Low and his appointed heads of the

various branches of the administration. High tone, business efficiency, genuine public spirit, and interest in municipal progress characterize not merely the mayor's office, but the work of nearly if not quite all of the numerous departments. New York is developing wonderfully, and Mayor Low's administration is contributing in a hundred valuable ways to the city's progress.

*Cuba's
Troubles
and Perils.*

The situation in Cuba continues to be one fraught with trials, difficulties, and dangers. It is hard to keep the sense of righteous indignation within moderate bounds when one remembers how clear and unmistakable was the moral obligation of Congress last winter to give tariff concessions to Cuba which would have obviated all the existing distress. It is not strange that the Cubans should feel bitterly disaffected toward this country. Nor is it unnatural that their disposition should be to disregard the terms of the Platt amendment as embodied in their constitution, or else to construe them as unfavorably toward this country as possible. In its serious financial plight the Cuban Government is proposing to try to raise a loan of \$35,000,000 in gold, the greater part of which is to be used to pay off the soldiers of the insurgent army, with a large slice to be loaned to planters and agriculturalists, to enable them to tide over the present disastrous season. This loan project is, of course, unfortunate, if not wholly ill advised; but it is hard to see in what other direction Cuba is to find relief. No man of any party ought to be elected to the Congress of the United States this fall who will not admit the duty of entering into a liberal reciprocity arrangement with Cuba, and will not promise to support such a policy. Meanwhile, the Cubans would do well to try to exercise patience, and keep their faith in the people of the United States, who, indeed, are distinctly with President Roosevelt in his Cuban policy, and as distinctly against the behavior of Congress in the last session. The Cuban authorities in particular will make a mistake if they disregard the obligations that they voluntarily assumed in adopting the Platt amendment. The lower house of the Cuban Congress, for instance, passed a resolution the other day repudiating an arrangement that Governor-General Wood had entered into with the Catholic Church authorities regarding compensation to the Church for certain property. If this resolution should be adopted by the upper house, and become effective, it would be not only in violation of the agreement entered into with the United States, but in defiance of the obligations assumed by the United States in the treaty of peace with Spain.

There would be no alternative for this country under such circumstances but to interfere, on the ground of its agreement with the government at Madrid.

*Problems of
"Church and
State."*

The separation of Church and State, as understood in this country, does not signify antagonism toward ecclesiastical bodies, nor any disposition to confiscate their property. Those settlements arranged in Cuba were in good faith on the part of this government, and the Cubans would do well to accept them as honorable and just, and to study diligently the methods by which we secure to all churches freedom and contentment, while giving none of them a voice in the conduct of the state. The European governments and newspapers seem at a loss to understand the apparently delightful relations between the Government at Washington and the Vatican, in view of the pleasant things that have been said on both sides in connection with the visit of Governor Taft to Rome, the friendly exchange of greetings between President Roosevelt and the Pope, and the announcement that all difficulties in the Philippines are in the way of being settled. Europe continues to smile in an amused and superior way at the American statement to the effect that Governor Taft's mission was not a diplomatic one. They fail to understand because the explanation is so simple and easy, whereas they are looking for something more complicated. The United States has no controversy at all with the Vatican, with the Catholic authorities in the Philippines, or with the friars. It has no policy that would lead it to demand the exclusion of any class of men whatsoever from its jurisdiction, whether in the Philippines or in the United States. It had simply a business transaction or two on foot that could be better initiated at Rome than elsewhere. Its position in dealing with the land question was in some ways analogous to that of the British Government in its treatment of the land question in Ireland. Practical conditions made it necessary that the friars, who could no longer live in



From the *Independent*.

James F. Smith. William H. Taft. John B. Porter. Bishop Thomas O'Gorman.

GOVERNOR TAFT AND HIS ASSOCIATES IN THE MISSION TO THE VATICAN.

their parishes on account of the hostility of the people, should sell their lands. The civil government of the Philippines was the best and most responsible agency for negotiating the purchase and subsequently reselling to the actual occupants and cultivators.

*The Friars
in the
Philippines.*

As to the withdrawal of the Spanish friars from the Philippines, there were reasons why on all accounts this was much to be desired. It was also evident, after conference at Rome, that it was neither necessary nor advisable that there should be any specified agreement on this point, but only a friendly understanding of the policy that would actuate the head of the Church. Since under the American rule no church establishment is possible, it is plain enough that the Catholic Church in the Philippines must as soon as possible be brought under the management of ecclesiastics accustomed to the American system; and we have the assurance of Archbishop Ireland and Bishop O'Gorman (who accompanied Judge Taft to Rome) that this is perfectly understood and agreed to at the Vatican. The completion of the negotiations will



M. FRANÇOIS COPPÉE, THE FRENCH AUTHOR, AND HIS COMPANIONS, PHOTOGRAPHED JUST BEFORE THEIR ARREST FOR THE PART THEY HAD TAKEN IN THE AGITATION AGAINST THE CLOSING OF THE RELIGIOUS FREE SCHOOLS. M. COPPÉE IS ON THE EXTREME LEFT.

be at Manila, where a papal delegate will represent the Vatican. The Spanish friars will have no further career in the Philippines, the friars' lands will be paid for honorably at a fair valuation, and religious associations will have neither more nor less position and authority in the Philippines than they have in the United States.

The "Orders" and the State in France. The position of the United States and its dependencies in the treatment of such questions seems a very fortunate one when compared with the agitation and strife into which other countries are plunged by complicated relations between governmental and ecclesiastical authorities. For example, two great European nations,—namely, France and England,—were last month principally absorbed with topics of this character. Hysterical excitement prevailed for a time in Paris, and later in more remote provinces of France, over the enforcement by the new ministry of the law relating to associations which was passed under the auspices of Premier Waldeck-Rousseau about a year ago. As explained to our readers at that time, this law was aimed at the existence in France of a great number of conventual establishments to which some 30,000 or 40,000 monks belonged and about 135,000 nuns. Some of the orders to

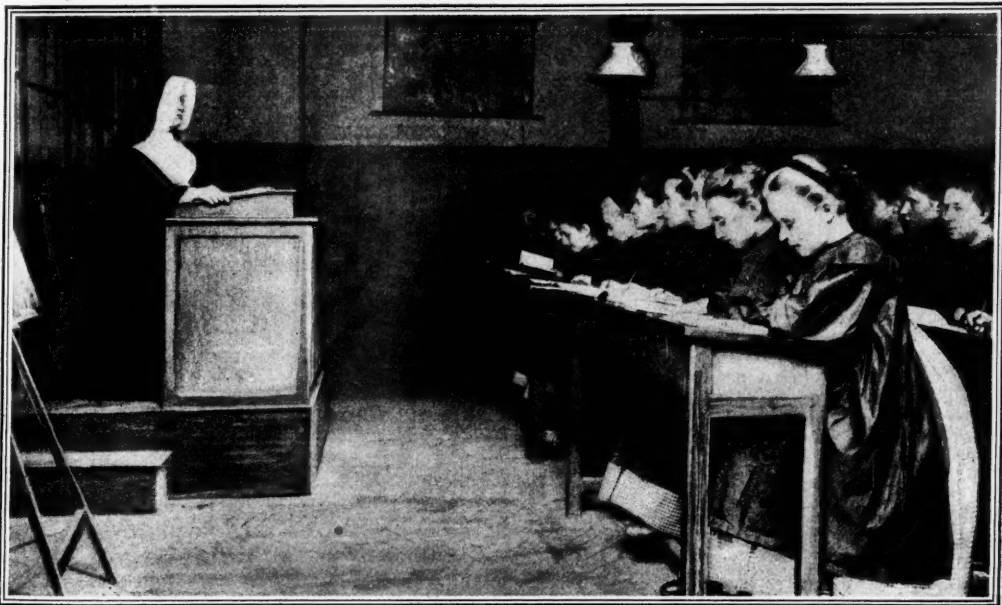
which these persons belonged were duly authorized by law and registered; but many others were not authorized, and there seemed to be many good reasons of public policy why such associations should all conform to the terms of some general law. It is a total mistake to assume that the new associations law contemplated the brutal expulsion of members of religious orders from France. To an American, its requirements would not seem unreasonable. The associations were asked to apply for registration, and, in doing so, to set forth what we should call the articles of agreement which held them together as a corporate body, and to meet further requirements of a general nature. Rather than meet these requirements, a number of religious orders withdrew altogether from French soil; some that remained have acted in disregard of the law.

The Schools and the Nuns. The agitation last month was due to the closing by the government of the schools carried on by members of orders, mostly women, who had not complied with the law. To make such schools legal in France it is requisite that an application should be entered, and certain other formalities complied with. The closing of schools in some instances led to physical conflict, and there were

street demonstrations and no little violent haranguing. The semi-political agitation on behalf of the priesthood naturally led to anti clerical demonstrations on the part of the socialists and advocates of an extreme policy. The Vatican has observed silence throughout this struggle in France. Perhaps it is perceived in Rome that it would be better for the French Catholics in the long run if something like the American system could be worked out. The newspaper reports to the effect that the enforcement of the associations law was likely to lead to a revolution that would overthrow the republic are, of course, absurd. France is accustomed to the ministrations of the many scores of thousands of women who belong to the religious orders, and will not dispense with them. But there is no good reason why their schools should not be registered and authorized, and brought into some sort of conformity to required educational methods and standards. The government ought, however, to have been tactful and tolerant. Religious fanaticism is at least more excusable than fanaticism on behalf of so-called liberalism or secularism. It was not obligatory upon Premier Combes to close all the unlicensed schools carried on by nuns of the teaching orders, but merely permissive. Thousands of these very schools had already shown deference to the new law by entering their applications. It would have been more statesmanlike to avoid conflict by allowing ample time for the law to take effect.

*The Agitation
in England.*

While America has given remarkable evidences of late of its progressive spirit in educational matters, and while the French are resolutely working out a more modern school system on an educational rather than an ecclesiastical basis, England has presented the pitiable spectacle of a persistent attempt on the part of the present Tory government to break down the elective public school boards, and to drive the system of elementary education back under the control of the authorities of the Church of England. With a huge majority at its back in the House of Commons, the government has, however, been obliged to throw its educational bill over to the next session. The shattered Liberal party had gratefully discovered that the Tory government's slight tax upon imported grain, and its official determination to put the schools under ecclesiastical control, was providing a basis upon which the Liberals could come together again with conviction and enthusiasm. The effective Liberal opposition shown in the House of Commons debates, while calculated to retard somewhat the progress of the measure, was nothing as compared with the object lesson furnished in a special election to fill a vacant Parliamentary seat for the North Leeds district. This constituency had been Conservative by a very large majority; but when its member of the House was promoted to the peerage the other day, the Liberals seized the



AN ORPHAN CLASS IN A ROMAN CATHOLIC FREE SCHOOL OF PARIS, SUPPRESSED LAST MONTH.

opportunity to carry the district very decisively upon the school question as the chief issue. It seems likely that if an appeal were taken to the country, the Liberals would return a majority to the House of Commons. Under these circumstances, Mr. Balfour allowed his educational bill to be postponed, and it may never become a law.

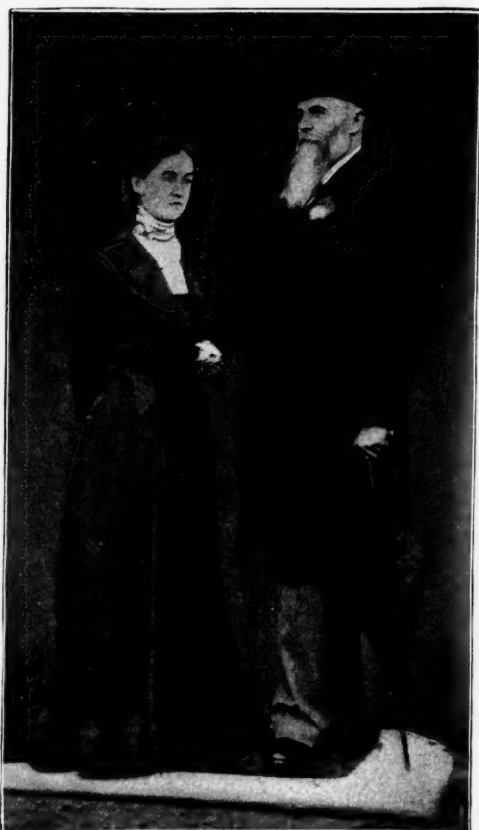
*Affairs in
England.*

The coronation of King Edward, postponed from June 26 by reason of the King's illness, was duly carried out on Saturday, August 9, in Westminster Abbey, amidst surroundings of a highly spectacular nature, reminding most observers rather of theatrical pageants than of anything else that had come within the range of their own experience. The King bore the ordeal very well indeed, while the venerable Archbishop of Canterbury, who officiated in the ceremonies, seemed to have scarcely strength enough for his duties. Subsequently the King returned again to the royal yacht *Victoria and Albert*, off the coast of the Isle of Wight, for further recuperation. The arrival in Europe of prominent Boers aroused the utmost interest last month. Gen. Lucas Meyer and his wife were received with every courtesy in England. Going to the Continent, General Meyer unfortunately succumbed suddenly to an



EMPIRE AND PEACE.

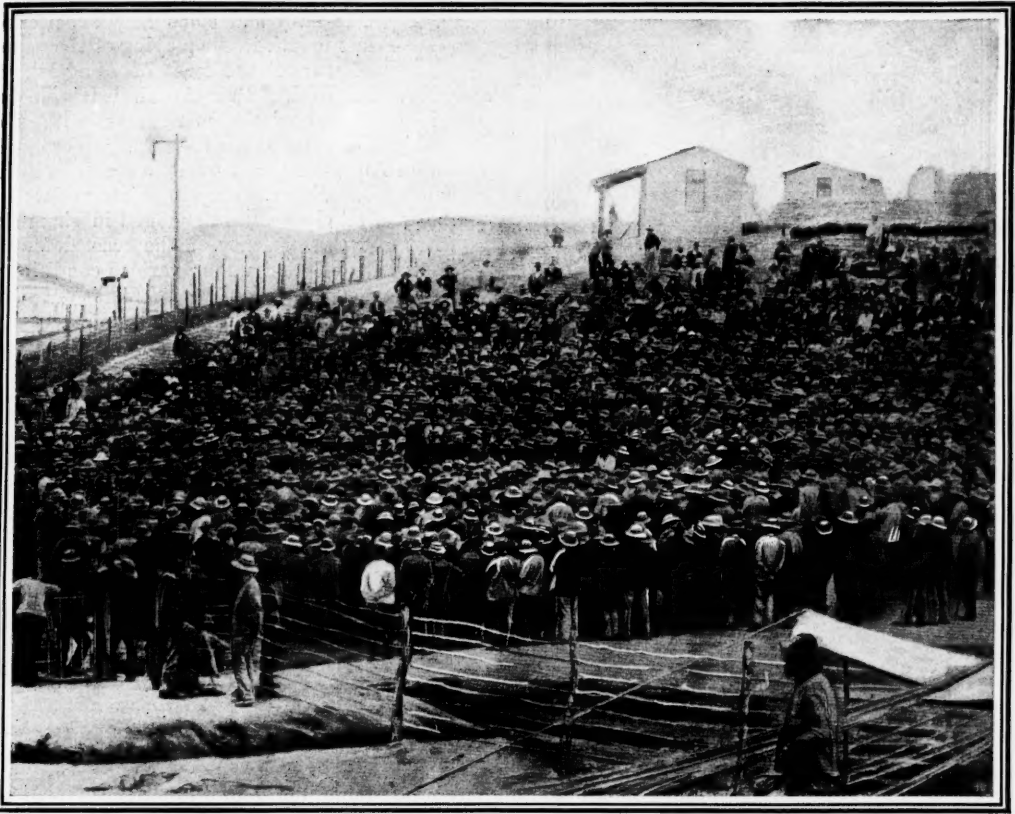
Coronation, Westminster Abbey, August 9; naval review, August 16.—From *Punch* (London).



THE LATE GEN. LUCAS MEYER AND HIS WIFE.

(From a photograph taken in July.)

attack of illness, and died on August 8. Ex-President Steyn, of the Orange Free State, arrived early in August, too ill to proceed to London, and he was transferred at Southampton to a vessel which carried him directly to Holland. The most enthusiasm, however, was aroused by the arrival of Generals Botha, De Wet, and Delarey at Southampton, on August 16. They found that officialdom had made every arrangement for their reception, and that they were expected to be prominent figures at the great naval review following the coronation festivities. They declined, however, to witness the review, although accepting the King's invitation to visit him on board his yacht, where their Majesties received the distinguished South Africans with friendliness and tact. With the least possible delay these Boer leaders then proceeded to Holland. Their object in coming to Europe was to collect money for the reestablishment of the Boers on their farms. They contradict abso-



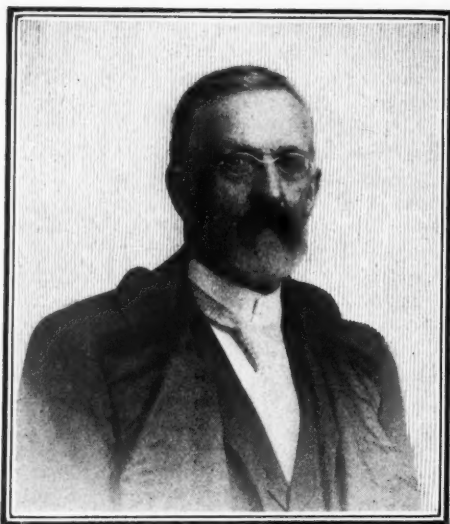
BOER PRISONERS ASSEMBLED IN CEYLON, JUST AFTER THE NOTIFICATION OF PEACE.

lately the statements given out by the British Government as to the extent to which Boer farm property was devastated. The generals have stated that it is their intention to visit the United States before going back to Africa. There is not much news as to plans for the carrying out of the agreement to transport the Boer war prisoners back to their homes. Evidently the reconstruction period in South Africa must be one of a good deal of private suffering and public difficulty. The Boers must be loyal, and the British generous.

*The Unending
South American
Strife.*

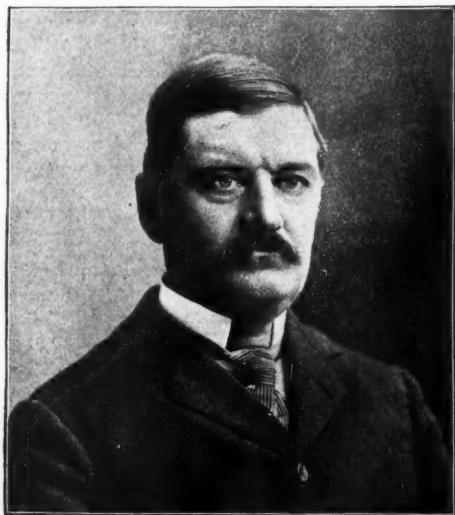
Until something very decisive occurs in the course of the civil combats that have been running along so obscurely in Venezuela and Colombia, it is not expected that the outside world will try to follow the meager and contradictory details of the marching, countermarching, and occasional fighting. Suffice it to say that during the last month General Matos, the leader of the revolutionary forces that were trying to overthrow the Castro government in Venezuela, was gaining ground, and was

likely in the near future to achieve complete success. Early in August he was said to have captured the important town of Barcelona, and to have invested Puerto Cabello, with the prospect of an early and successful termination of the campaign. In Colombia the fortunes of war seem to be going against the insurgents, and President Marroquin seems likely to suppress the uprising and to bring the situation under control. In that case, it will be with him that our Government will deal in concluding the final agreements about the Panama Canal. They have been having another revolution in Haiti, but the details are too trivial to be worth our space. It is to be noted, however, that the United States navy is on the ground nowadays to guard the interests of American citizens wherever disturbances occur in the West Indies or South America. Thus, we had several vessels last month off the coast of Venezuela, and a gunboat watching the situation in Haiti. The navy renders good service under these circumstances, and its growth and efficiency are matters of pride to the



PRESIDENT MARROQUIN OF COLOMBIA.

American people. The old question of the annexation of San Domingo and Haiti has been revived by the chronic inability of those ill-governed republics to maintain order, protect property, and develop the resources of the beautiful island that they share between them. From our own point of view, the acquisition seems scarcely desirable. A better bargain would be the outright purchase of the Isthmus before we spend Uncle Sam's money on a ship canal.

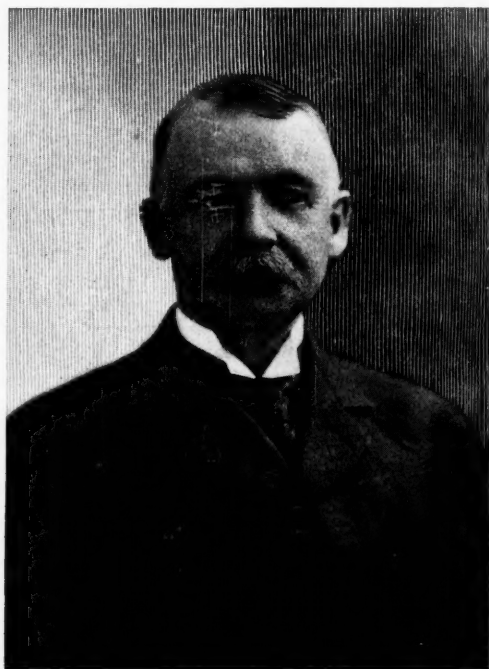


COMMANDER JOHN E. PILLSBURY.

(Who will have charge of the invading fleet in the war game.)

*Mimic War
Game on the
Atlantic Coast.*

Our navy had some new experience last month in the playing of the game of war off the coast of Long Island and New England. Rear-Admiral Higginson was in command of the maneuvers, with the battleship *Kearsarge* as his flagship. Operations began on August 20, and were to continue until September 6. From twenty to thirty vessels of the navy of all classes were engaged in sham actions, to test the efficiency of the coast defenses of Long Island Sound under various conditions. These so-called games had been thought out with the utmost care and scientific skill, and were undoubtedly destined to be of value both in the



REAR-ADMIRAL HIGGINSON.

(Commanding the fleet mobilized for the North Atlantic war game, August 20 to September 6.)

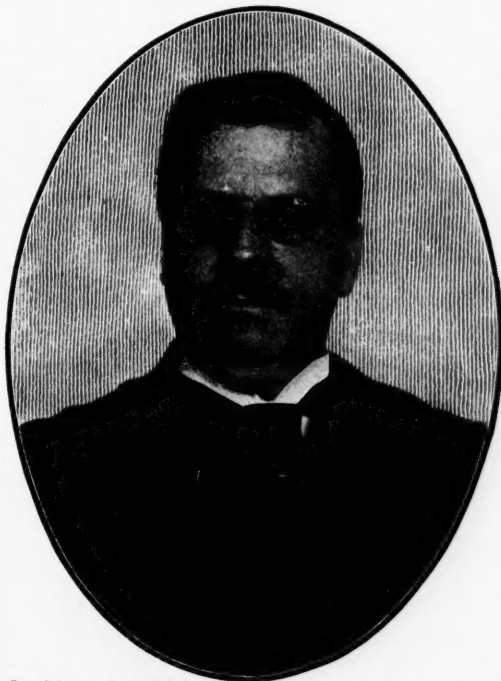
training of our naval and military forces, and also in the better understanding of all the problems involved in seaboard defense. The part that the army was to play in the work of coast defense was not so fully announced in advance. In fact, as to details great secrecy had been observed by the authorities both of the army and the navy. It was evident, however, by the middle of August that things were going to be done on a large scale, and in a very interesting way. The *Army and Navy Journal* declared, apropos

of the attempt at secrecy as to the objects and plans of the maneuvers of the forces engaged, that "scarcely less important than the test of the coast defenses of Long Island Sound is the question whether a series of maneuvers like those projected can be organized and executed without the discovery beforehand of their working plans. For that reason all details as to the proposed evolutions are sedulously guarded from the public, the purpose being to ascertain whether it is possible for an enemy, which will be virtually represented by the newspaper correspondents, to gather correct advance information as to the plans of the Government's operations under conditions like those which prevail in time of war. What may be counted on with reasonable certainty is that these evolutions will show splendid progress in the use of the search-light, signalling, including wireless telegraphy, naval scouting, and gun practice ashore and afloat."

Coast-
defense
Problem.

As to the part that the army was to play under command of Major-General Mac Arthur, the *Army and Navy Journal* further remarked: "It is an open secret in military circles that these maneuvers will find the ordnance and artillery in a state of unpreparedness. When the preparations began, the

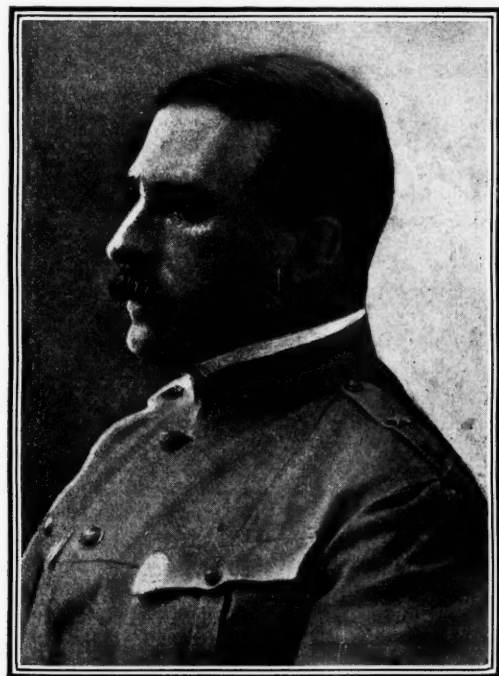
officers in charge had to deal with many discouraging conditions, including ungarrisoned posts, unfinished forts, incomplete armament, threatened delay in the delivery of supplies, and a demand for immediate modifications which it



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GEN. ARTHUR MAC ARTHUR.

(Commanding the land forces and fortresses involved in the maneuvers.)



GEN. LEONARD WOOD.

was originally intended to accomplish a year hence. These disheartening conditions have been largely overcome or will be before the date set for the maneuvers, but it will be only because of the most extraordinary and wearisome effort on the part of the officers in charge." If as one result of the maneuvers Congress should deal more liberally and intelligently with the coast-defense problem, this war game will have been played to good purpose. Naval maneuvers on a much larger scale are planned for the Caribbean Sea next winter. Meanwhile, in response to the invitation of the German Emperor, American officers have gone to attend the forthcoming maneuvers of the German army in East Prussia. President Roosevelt sent as our chief representatives, not to mention the junior officers who attended them, General Young, Adjutant-General Corbin, and General Wood. This invitation came as one of the re-



ADJUTANT-GENERAL HENRY C. CORBIN.



GEN. SAMUEL B. M. YOUNG.

(With Gen. Leonard Wood, these two high officers have sailed to witness the German army maneuvers. Our pictures show them in their new uniforms, just adopted by the United States War Department.)

sults of the American visit of Prince Henry. Another result has been the liberal distribution of German decorations among those in this country who were officially concerned with the reception and entertainment of the Prince.

*The World of
Finance and
Industry.*

The return of Mr. J. Pierpont Morgan to the United States from his summer sojourn in Europe, on August 20, was looked upon as a matter of greater interest and concern in the realm of actual affairs than the doings of European monarchs; while the reported serious breakdown of the health of Mr. Charles M. Schwab, president of the United States Steel Corporation, was seized upon by the press as a matter hardly less vitally important than the illness of the King of England a few weeks before. As for the great movements, national and international, in the business world, they have counted for more of late with practical men than the talk of alliances and combinations among the governments of the world. Certainly we are living in a period of industrialism such as could hardly have been imagined a generation ago. Mr. Morgan's return was expected to affect favorably several things of deep moment. Foremost among these was the protracted anthracite coal strike, which entered

upon its fifteenth week as Mr. Morgan landed in New York. The retail price of anthracite coal in New York on that date was \$9 a ton, but much higher rates were about to go into effect, with the wholesale prices advanced to \$10 and \$11 a ton, according to grade. Thousands of people were putting in gas ranges, and there was much uneasiness as to the winter's supply of fuel.

*As to the
Coal Strike.*

Rioting and disorder at Shenandoah, Pa., became so violent toward the end of July that Governor Stone was obliged to order fifteen hundred State troops to the town, and military aid was also necessary for the preservation of order at several other points. Several lives, meanwhile, had been sacrificed in incidental conflicts, although in the main the strikers had conducted themselves with unexpected restraint. President Mitchell's powerful influence had been constantly exerted in behalf of the strict avoidance of lawbreaking and disorderly methods. Mr. Wilson, secretary-treasurer of the United Mine Workers, stated on August 20 that the funds for the maintenance of the strikers on the plan arranged at the Indianapolis convention were coming to hand in a satisfactory manner, and that the bituminous miners alone were contribut-

ing \$130,000 a week. It was somehow expected on all sides that Mr. Morgan, in view of his financial relations to the coal-carrying roads, might help to find a basis upon which the strike could be ended in September.

*As to Trusts
and "Com-
bines."*

It was further hoped that Mr. Morgan would bring with him some definite news as to the organization of the great steamship combination that was pending under his leadership, but which had not yet assumed a corporate form. His arrival was simultaneous with reports from England to the effect that the much-talked-of project of a rival steamship service, to be heavily subsidized by the Canadian and English governments and to be administered by the Canadian Pacific Railroad, was not at all likely to materialize in the near future. Certain railroad amalgamations in the South were also said to be awaiting Mr. Morgan's coming. Mr. Schwab, whose indisposition had been much exaggerated by the newspapers, went abroad for a rest on the day following Mr. Morgan's return. The great iron and steel interests of the country,—so largely under control of the corporation of which Mr. Schwab is president,—continue to show unflagging prosperity; and it is as nearly certain as possible that they will be kept busy on a profitable basis for at least two years to come. The amalgamating tendency has had further illustration in the formation of a company which unites a number of the largest grain harvester concerns, with a capital of \$120,000,000, under the very appropriate presidency of Mr. Cyrus A. McCormick, of Chicago. On the day following the incorporation of this International Harvester Company there was an announcement of the incorporation, at Pierre, S. D., of the Farmers' National Exchange Company, with an authorized capital of \$50,000,000. It remains to be seen whether the farmers can advance their interests by attempting to enter on a large coöperative scale into the business of marketing their products.

*Foreign
Affairs in
General.*

As to foreign affairs in general this past summer, there has been little of achievement or action, but floods of strenuous discussion. In England, for instance, Parliament adjourned on August 8, not to reassemble until October 16, with the declaration that the question of subsidies to British steamship lines was not ready for action, and that the pending education bill would also have to be postponed as unfinished business. The conference between the colonial department, under Mr. Chamberlain's lead, and the visiting premiers of the self-governing colonies also failed to accomplish the specific

results which much talk had led the world to believe were going to accrue. The conference ended on August 11. On the Continent, the Russian Government had started a world-wide discussion by suggesting to the other principal governments of Europe an international conference on the subject of trusts and industrial combinations. Nothing but talk is likely to result from this proposal. The powers do not take to the idea. The suggestion grew more particularly out of the action taken at the recent Brussels conference for the abolition of sugar bounties. There are, however, some very interesting problems of international trade arising from new commercial methods made possible by the American trusts and the great exporting syndicates of Germany; and M. de Witte's proposed conference is by no means so Quixotic as at first blush it may have seemed to some of the newspapers. While such a conference could not, under present conditions, result in practical agreements, it might greatly aid in the study of modern trade problems, and thus indirectly help to bring about solutions.

*The
Ubiquitous
Kaiser.*

The activity of the German Kaiser has been unabated during the past summer, and he has been much at sea on board his royal yacht the *Hohenzollern*, and also on his dashing yacht the *Meteor*, which, while not very lucky in winning races, has, nevertheless, proved a satisfactory boat. Early in August, the Kaiser's maritime excursions brought him to the coast of Russia, where he hobnobbed with the Czar for two or three days, visited various Russian warships, and observed their maneuvers. A topic of anxious discussion in Germany last month was the proposed holding of the autumn army maneuvers in the province of Posen (the Polish part of Prussia), where disaffection has of late been so bitter. It was regarded in many quarters as a mistake of policy for the Emperor to march into Posen at the head of a hundred thousand troops, not to mention the considerable danger of attempts on his life. Late in August it was announced that the plans had been changed somewhat, and that the city of Frankfort-on-the-Oder would be made the Emperor's headquarters for the reviewing and the maneuvering of the troops. The visit of the King of Italy to Russia had continued last month to form a favorite topic of European discussion, as marking the growing friendliness between the great powers as grouped in the triple and dual alliances. There is constant talk of closer economic relations among the European states, to meet the increasing pressure of American competition. European wars grow more and more unlikely.

*In the
Far East.*

In the far East there were no events of an exceptionally decisive nature, though it was reported that the fresh ascendancy of Japan in Korea had been seized as a pretext by the Russians for a postponement of the evacuation of Manchuria. There has never been any good reason to believe that the Russianization of Manchuria would be abandoned, although formal annexation might be indefinitely postponed. China comes duly forward with interest payments upon the war indemnity; has secured the evacuation of Tien-tsin by the powers; and seems to be introducing very considerable reforms. The Hon. John Barrett, who is in the far East on behalf of the St. Louis Exposition, is meeting with splendid success in persuading the Oriental nations to make large and attractive displays. The time is exceedingly favorable for a great growth of trade relations between the United States and the Orient, and the St. Louis fair ought to be made the means of adding immensely to the profitable traffic that follows the Pacific Ocean routes. The death of Mr. John W. Mackay has not thwarted or seri-

ously delayed the project of a cable line, to be laid by the company of which he was the chief promoter, from San Francisco to the Philippines and China, by way of Hawaii and Guam. The recent visit to the United States of Baron Shibuzawa, the leader in the commercial development of Japan, gives timeliness to a sketch of his career that appears in this number of the REVIEW. Prince Henry is not the only scion of a royal family who has visited the United States in the year 1902. Last month, Prince Tsia Chen, a cousin of the Emperor of China, who had gone to England as special representative at the coronation, spent several days here on his way home. With him was the distinguished diplomat, Sir Liang Chen Tung, who is to succeed the genial and irrepressible Mr. Wu as Chinese Minister to the United States. He will not, however, enter upon his official duties here for several months. Our relations with China are now particularly favorable, thanks to the course that has been consistently pursued by our State Department during the last two or three years, and that has been appreciated.



James B. Reynolds.
Representing Mayor Low.

Asst. Secy. of State Pierce.

Sir Liang Chen Tung.

Prince Tsia Chen.

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SOME DISTINGUISHED CHINESE VISITORS IN NEW YORK LAST MONTH.

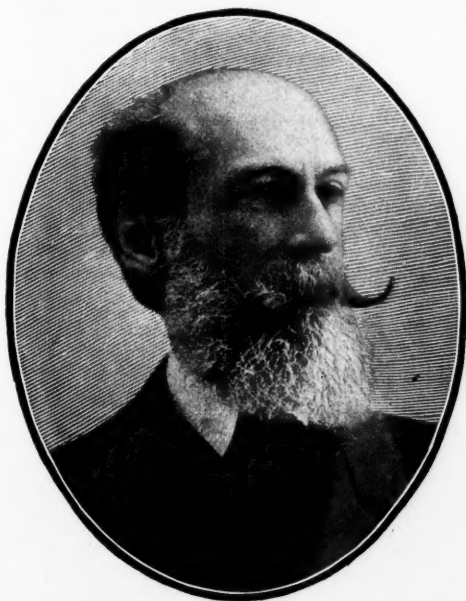
RECORD OF CURRENT EVENTS.

(From July 21 to August 20, 1902.)

POLITICS AND GOVERNMENT—AMERICAN.

July 21.—The Kansas Supreme Court issues a writ ousting the American Book Company from the State. President Roosevelt designates Col. R. M. O'Reilly as surgeon-general of the army. Maj.-Gen. John R. Brooke, U.S.A., is placed on the retired list; Major-General MacArthur takes command of the Department of the East.

July 22.—Governor Nash convenes the Ohio Legislature in extra session on August 25, to provide for the government of municipalities, the Supreme Court having declared existing laws unconstitutional.



GENERAL MATOS, THE VENEZUELAN REVOLUTIONIST.

July 23.—North Dakota Republicans renominate Gov. Frank White.

July 24.—Vermont Democrats nominate Felix McGettrick for governor.

July 30.—Iowa Republicans declare in favor of tariff revision, name President Roosevelt as a candidate to succeed himself in 1904, and commend the policy of reciprocity with Cuba.

July 31.—Michigan Democrats nominate George H. Durand, Gold Democrat, for governor.

August 1.—North Dakota Democrats nominate J. E. Crogan for governor.

August 2.—Hawaiian Republican primaries indicate a large increase in the party vote.

August 7.—Democratic candidates for judges of the

State Supreme Court and Court of Chancery Appeals are elected in Tennessee. Wyoming Democrats nominate George T. Beck for governor.

August 8.—President Roosevelt approves certain conditions attached by Attorney-General Knox to the proposal of the Pacific Commercial Cable Company for the construction of a Pacific cable.

August 11.—The retirement of Justice Horace Gray, of the United States Supreme Court, is announced; President Roosevelt names as his successor Justice Oliver Wendell Holmes, of Massachusetts (see page 307).

August 12.—The California primaries result favorably for the regular Republican organization.

August 14.—Palmer S. Mosely defeats William L. Byrd for governor of the Chickasaw Nation, Indian Territory, by six votes.

POLITICS AND GOVERNMENT—FOREIGN.

July 21.—The Sultan of Turkey appoints a commission to consider reforms in Macedonia.

July 23.—The Lord Chief Justice of England, Mr. Justice Bigham, and Sir John Ardagh are appointed a royal commission to proceed to South Africa and inquire into sentences imposed by the British authorities under martial law. Sentences are pronounced on the officials of the Leipziger Bank, which failed in 1901.

July 25.—President Loubet of France signs a decree for the forcible seizure of additional Church schools under the Law of Associations; intense opposition to the government's policy continues to be manifested throughout the country. The Turkish commission authorized by the Sultan report on Macedonian reforms.

July 26.—The provisional government of Haiti declares General Firmin, the revolutionary leader, an outlaw.

July 29.—For the assassination of the Marquis de Mores, which took place in the Sudan in June, 1896, El Kheir is condemned to death at Susa, near Tunis, and Hamma Chiekh is sentenced to twenty years' imprisonment; of 17 other Arabs accused of complicity in the crime, 6 are sentenced in default to be put to death and 11 to hard labor.

July 31.—The Spanish Minister of Finance issues a statement showing a serious deficiency in the national revenues. Lord Rosebery makes an important address to the Liberal League of Great Britain.

August 4.—The Cuban House passes a bill authorizing a loan of \$35,000,000, the minimum issue to be 90 per cent. and the maximum interest 5 per cent., redeemable in forty years.

August 5.—It is announced that the Firmin party in Haiti has formed a provisional government at Gonaives. Premier Sagasta of Spain announces his desire to retire from public life.

August 7.—The British House of Commons, by a majority of 123, adopts clause 7 of the education bill, which gives the predominance in the management of voluntary schools to churchmen.

August 8.—Austen Chamberlain, son of the Colonial Secretary, becomes Postmaster-General of Great Britain, the Earl of Dudley Lord Lieutenant of Ireland, and Charles T. Ritchie Chancellor of the Exchequer (see page 297)....The British Parliament adjourns until October 16.

August 9.—King Edward VII. is crowned in Westminster Abbey.

August 11.—The conference of colonial premiers in London holds its final session, adopting a resolution in favor of the metric system of weights and measures.

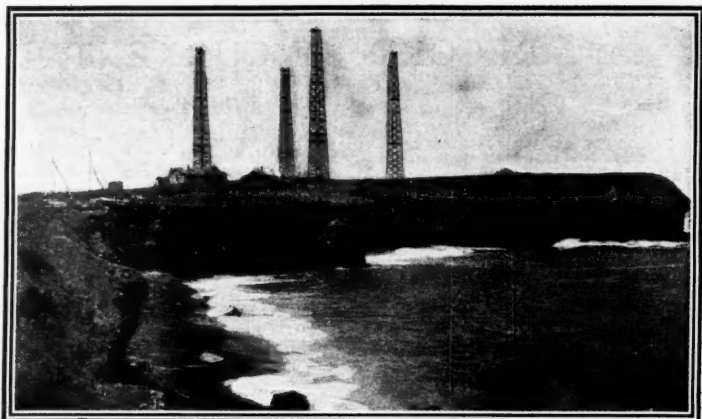
August 12.—The city of Barcelona, Venezuela, is reported captured and sacked by the revolutionists, after a severe battle, in which 167 men were killed.

August 18.—Señor Emilio Terry offers his resignation as Cuban Secretary of Agriculture.

INTERNATIONAL RELATIONS.

July 26.—Diplomatic relations between Italy and Switzerland are resumed, through the mediation of Germany.

July 28.—As an act of courtesy to the United States, President Zelaya of Nicaragua commutes the death



THE MARCONI WIRELESS TELEGRAPH STATION AT GLACE BAY, CANADA.

(Showing towers 215 feet in height.)

sentence imposed on Dr. Russell Wilson, of Ohio....The Spanish Cabinet Council discusses negotiations for a treaty of commerce with Cuba.

July 29.—The United States Government refuses to recognize the exclusive landing rights in the Philippines granted to cable companies by Spain....Great Britain withdraws all claim to sovereignty over the Bay Islands of Utila, Ruatan, Bonacca, or Guanaja, Felna, and Barbarat, acknowledging that they belong to Honduras.

August 1.—By agreement between Italy and Switzerland, important changes are made in the consular services of the two countries.

August 5.—The Hon. Andrew D. White, United States Ambassador to Germany, offers his resignation, to take effect on November 7 next.

August 11.—The treaties between Chile and the Argentine Republic, providing for arbitration and the limitation of armaments, are approved by the Chilean Congress by a large majority.

August 12.—A United States warship is ordered to Venezuela, at the request of Minister Bowen, to protect American interests.

August 15.—The city of Tientsin is transferred to the Chinese Government.

OTHER OCCURRENCES OF THE MONTH.

July 21.—Governor Taft has a farewell audience with the Pope....The excursion steamer *Primus* is cut down by a Hamburg-American tug in the Elbe; 50 persons are drowned.



THE KING OF ITALY ON HIS RECENT VISIT TO RUSSIA.

(The King in the center, with the Czar at the left.)

July 22.—A monument to Gen. William H. T. Walker, a famous Confederate officer, is unveiled at Atlanta, Ga....The Pennsylvania Capitol Commission announces the selection of Edwin A. Abbey as mural painter and George Barnard as sculptor for the new capitol.

July 23.—By the capsizing of a Chinese steamer on the West River 200 persons are drowned.

July 24.—Judge Jackson, of the United States District Court, Northern District of West Virginia, sentences miners' agitators to prison for violation of an injunction.

July 26.—An alarming report is made by the Costa Rican commission appointed to investigate recent volcanic eruptions.

July 27.—Earthquake shocks do great damage in Santa Barbara County, Cal.

July 28.—An area 200 miles square in northern Nebraska, North and South Dakota, and northeastern Iowa is visited by an earthquake shock.

July 29.—Cardinal Gotti is chosen to succeed the late Cardinal Ledochowski as Prefect of the Propaganda at Rome.

July 30.—Troops are ordered out to quell the rioting of striking anthracite miners at Shenandoah, Pa.

July 31.—Earthquake shocks in California again cause destruction of property, especially in Santa Barbara County.

August 4.—The Italian Government orders the establishment of the Marconi system of wireless telegraphy on all its warships.

August 5.—The two hundred and fiftieth anniversary of the settlement of York, Maine, is celebrated.

August 12.—The International Harvester Company, with a capital of \$120,000,000, is incorporated at Trenton, N. J.

August 16.—The Boer generals, Botha, De Wet, and Delarey, are cordially received in England....King Edward reviewed the British Channel Fleet in Portsmouth Harbor.

August 18.—A volcanic eruption on the small island of Torishima, Japan, kills 150 people....The Moros on the island of Mindanao, P. I., begin active hostilities.

August 19.—The Boer generals arrive in Holland.

August 20.—The maneuvers of the United States navy off the New England coast are begun, the defense squadron, commanded by Admiral Higginson, starting from Rockport, Mass., on a search for the attacking cruisers *Prairie*, *Panther*, and *Supply*, under Commander Pillsbury.

OBITUARY.

July 21.—Gen. William H. Barnes, of San Francisco, Civil War veteran and a leading lawyer of the Pacific coast, 66.

July 22.—Archbishop Thomas W. Croke, of Cashel, Ireland, 78....Cardinal Ledochowski, Prefect of the Congregation of the Propaganda of the Roman Catholic Church, 80.

July 23.—Col. William H. Lockwood, a prominent citizen of South Carolina, 56....Frank Mulgrave Taylor, of Long Branch, N. J., journalist, 38....Royal E. Robbins, of Boston, founder of the American Waltham Watch Company, 78.

July 24.—Bishop Robert Woodward Barnwell, of the

Episcopal Diocese of Alabama, 53....Ex-Congressman Robert H. McClellan, of Galena, Ills., 79.

July 25.—Rev. T. C. Reed, president of Taylor University, Indiana, 56....Philip J. Markley, of New Britain, Conn., national advocate of the Knights of Columbus, 47.

July 26.—Dr. Charles Kendall Adams, former president of the University of Wisconsin, 67 (see page 310).Prof. George Mann Richardson, of the faculty of Leland Stanford University, 38.

July 27.—Philip H. Kumler, a prominent attorney of Cincinnati, 65.

July 28.—Jehan Georges Vibert, French painter and author, 62....Rev. Dr. Stephen L. Baldwin, secretary of the Missionary Society of the Methodist Episcopal Church, 67....Chief Rabbi Jacob Joseph, head of the orthodox Jews in the United States, 62 (see page 311)....Ex-Judge Van R. Patterson, of the California Supreme Court, 54....Col. James B. Maynard, of Indianapolis, formerly a prominent newspaper man of Indiana, 83.

July 29.—John W. Ross, of Washington, D. C., former Commissioner of the District of Columbia, 61....Rev. Charles E. Searle, master of Pembroke College, Cambridge, 74.

July 31.—Rabbi Benjamin Szold, of Baltimore, 73.

August 1.—Mrs. Elizabeth Drew Barstow Stoddard, poet and novelist, 79....Rt. Rev. F. Ulloa y Larios, Roman Catholic Bishop of Nicaragua, 84.

August 2.—Alanson Trask, formerly a prominent business man of Brooklyn, N. Y., 94.

August 3.—Rev. William Bryant Brown, D.D., of East Orange, N. J., 86.



BOY SOLDIERS ENLISTED BY THE COLOMBIAN GOVERNMENT.



Archbishop Croke.

Cardinal Ledochowski.

Archbishop Feehan.

THREE ROMAN CATHOLIC PRELATES WHO HAVE RECENTLY DIED.

(Most Rev. Thomas W. Croke, who died on July 22, had been closely identified for nearly half a century with the Irish Nationalist cause. Cardinal Ledochowski, who died on the same day with Archbishop Croke, was Prefect of the Propaganda at Rome; he had been created cardinal by Pope Pius IX. Archbishop Patrick A. Feehan, who died on July 12, was the first ecclesiastic to preside over the archdiocese of Chicago.)

August 4.—Hendrik Willem Mesdag, the Dutch painter of sea scenes, 71....Commodore Joseph E. Montgomery, of the Confederate navy, 85....James F. Legate, a veteran Kansas politician, 72....Swami Vivekananda, organizer of the Vedanta movement in America, 36.

August 5.—President William M. Beardshear, of the Iowa State College, 52.

August 6.—Prof. John Jay Watson, violinist, composer, and musical director, 72....Sheriff Samuel F. Pearson, of Portland, Me., 61.

August 7.—Rudolph von Bennigsen, German Liberal statesman, 78.

August 8.—Gen. Lucas Meyer, of the Boer army.... John H. Twachtman, American landscape painter, 49....Col. John W. Taylor, veteran of the Civil War, 86.

August 9.—James J. J. Tissot, the French artist, 66.

August 10.—United States Senator James McMillan,

of Michigan, 64....Mrs. Eliza Young, the oldest actress in America, 90.

August 12.—Ex-Governor Lorrin A. Cooke, of Connecticut, 71....Dr. Martin Luther Holbrook, specialist in hygiene, 71....Ex-State Senator James Arkell, of New York, 72.

August 13.—Gen. Henry N. Hooper, veteran of the Civil War, 67.

August 15.—Luther R. Marsh, law partner of Daniel Webster, 89.

August 17.—George M. Hopkins, associate editor of the *Scientific American*, 60....William A. Hemphill, founder of the *Atlanta Constitution*, 60.

August 18.—Prof. Leopold Schenck, of Vienna, author of "The Determination of Sex," 62....Gen. Charles G. Loring, for many years director of the Boston Museum of Fine Arts, 74....Benjamin F. Guild, one of the editors and owners of the *Boston Commercial Bulletin*, 88.

FORTHCOMING EVENTS.

THE following conventions have been announced for this month: National Convention of Employer and Employee, at Minneapolis, Minn., on September 22-26; International Conference on Hybridization and Plant Breeding, at New York, on September 30-October 2; Worcester County Musical Association annual musical festival, at Worcester, Mass., on September 22-27; National Baptist Convention (Colored), at Birmingham, Ala., on September 17-22; American Association of Obstetricians and Gynecologists, at Washington, D. C., on September 16-18; American Official Surgeons' Association, at Chicago, on September 8; Fifty-Year Jubilee of the Swedish Baptist Denomination of America, at Chicago, on September 21-23; American Dermatological Association, at Boston, on

September 18-20; National League of Veterans and Sons, at Saginaw, Mich., on September 10-11; American Veterinary Medical Association, at Minneapolis, Minn., on September 2-5; American Civic Improvement League, at St. Paul, Minn., on September 24-26; International Mining Congress, at Butte, Mont., on September 1-5; National Railway Transportation Association at Buffalo, on September 19; American Electro-Therapeutic Association, at Kaaterskill, N. Y., on September 2-4; American Electro-Chemical Society, at Niagara Falls, on September 15-17; Society of the Army of the Potomac, at Gettysburg, Pa., on September 19-20; National Prison Association, at Philadelphia, on September 13-18; United Typothetæ of America, at Pittsburg, Pa., on September 8-11.

RECENT CARTOONS ON POLITICS AND BUSINESS.

THERE is a pretty widespread opinion that the orthodox Republican leaders are quite too much disposed to treat the question of tariff revision as a purely "academic" one, to quote the word used by Secretary Shaw in his speeches last month in New England. This year's Republican campaign book glorifies the protective tariff in well-worn, old-fashioned phrases, but does not say anything about revision; and the word Reciprocity does not even occur in the index. It does, to be sure, print Mr. McKinley's last speech.



BLIND TO THE DAWNING SUN.—From the Eagle (Brooklyn, N. Y.).



ON THE IMPORTANCE OF LOOKING BEHIND YOU.—From the Eagle (Brooklyn, N. Y.).



JIM HILL CANNOT GET OVER THE HABIT OF SITTING DOWN TO THE TABLE WITH "US PLAIN FOLKS" OCCASIONALLY AND ENJOYING A GOOD OLD-FASHIONED MEAL.

From the *Tribune* (Minneapolis).

We devote this page to four cartoons from the last month's work of Mr. Bowman, of the Minneapolis *Tribune*. They relate (1) to Mr. James J. Hill's recent friendly conferences with the farmers of the Northwest who are served by the great railroad systems that he dominates; (2) to Mr. Bryan's recent activity and prominence in political discussion; (3) to the remarka-



MR. W. J. BRYAN, A WELL-KNOWN POLITICIAN OF LINCOLN NEB., WISHES TO ANNOUNCE THAT THE "REPORTS OF HIS DEATH HAVE BEEN GREATLY EXAGGERATED."

From the *Tribune* (Minneapolis).

ble way in which Senator Spooner is looming up on the Wisconsin horizon, in spite of recent happenings; and (4) to the alleged discomfiture of the Democratic party because its rival has undertaken to appropriate the anti-trust issue as a part of its own stock in trade. Mr. Bowman's work is always humorous, and it usually shows political keenness, though strictly Republican.



WILL THE MOUNTAIN GO TO MOHAMMED?

From the *Tribune* (Minneapolis).



DEMOCRATIC PARTY: "Blame it, anyway; he's landed the very fish I wanted to catch."

From the *Tribune* (Minneapolis).



NURSERY RHYMES FOR INFANT INDUSTRIES.

Little Boy Blue, come blow your horn;
There are trusts in the meadow and trusts in the corn!
To curb the fat trusts not an effort he'll make,
As a champion sleeper he captures the cake!

From the *Journal* (New York).



NURSERY RHYMES FOR INFANT INDUSTRIES.

Old King Coal was a jolly old soul,
And a jolly old soul was he:
When he felt in the humor
He'd rob the consumer
And chuckle with fiendish glee.

From the *Journal* (New York).



WILL IT BE MORE PALATABLE?

From the *Ohio State Journal* (Columbus).



DUMPED RIGHT IN THE WAY.

From the *Ohio State Journal* (Columbus).



THE CORONATION HAS COME AT LAST.
From the *World* (New York).



MR. BALFOUR, THE UNSUSPECTING GOLF PLAYER.
"Congratulations, your Excellency, upon your selection as prime minister."
"What? I prime minister? I didn't know it; I never read the newspapers."
From *Ulk* (Berlin).



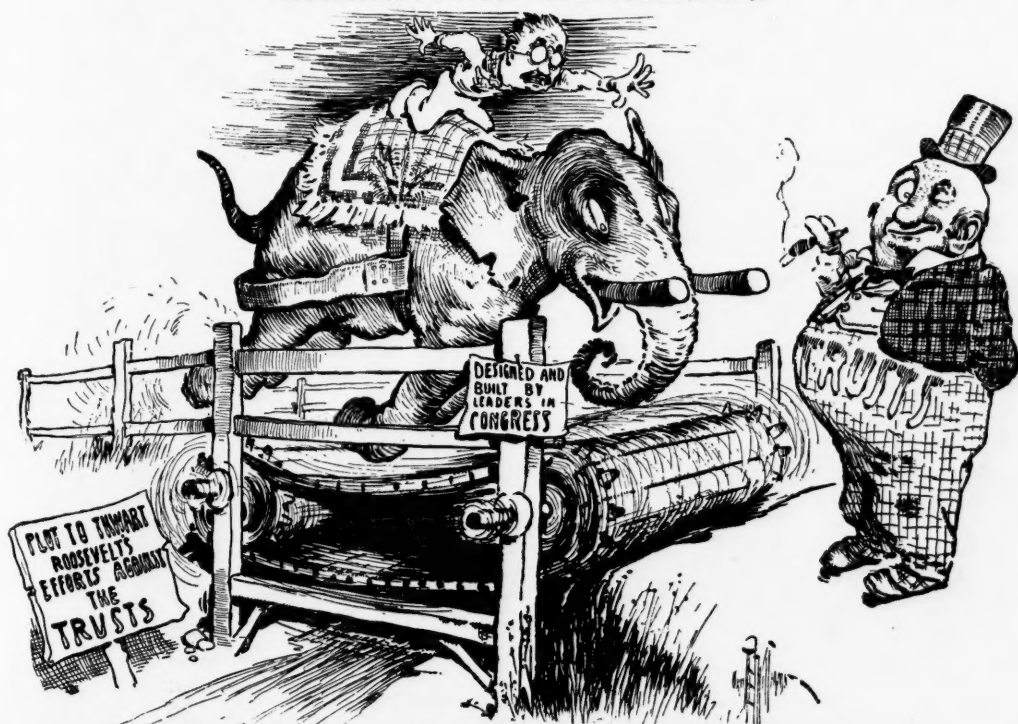
PEACE IN EUROPE RESTS ON THE BAYONETS OF THE POWERS.
From the *Amsterdamer* (Holland).



IF UNCLE SAM WASN'T STRONG HE COULDN'T STAND IT.
From the *Herald* (New York).



"ARE THEY GAINING ON ME?"—From the *Herald* (Boston).



TRICKED AGAIN.—From the *Herald* (Boston).



THE LOVING-CUP—THIRD TIME AROUND, 1902.

From the *Inquirer* (Philadelphia).

The cartoonist noted the renewal of the Triple Alliance as assuring the peace of Europe, following the making of peace in South Africa and in the Philippines.



"WE SNATCHED THE CLOTHES OF THE WHIGS WHILE THEY WERE IN SWIMMING."—*Disraeli*.

From the *Daily Eagle* (Brooklyn, N. Y.).



THE FIRST STEP.

From the *Tribune* (Minneapolis).



WHY NOT AN AUTOMATIC SUBSTITUTE?

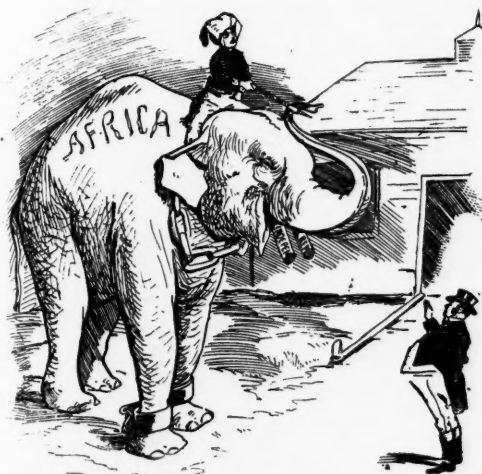
"It is announced that the President will omit handshaking during his Western tour."

From the *Daily Eagle* (Brooklyn, N. Y.).



Apropos of the retirement of the gorgeous Lord Hopton from the governor-generalship of Australia. He

is said to have found the salary hopelessly insufficient to support his ideas of the dignity of the office.



"PEACE!"—ENGLAND'S NEW WHITE ELEPHANT.

MAHOUT CHAMBERLAIN: "Well, here he is, sir, at last. I've sawn off his tusks, and I think in time he'll become quite tame, and feed out of your hand."

J. B.: "But won't them tusks grow again?"

CHAMBERLAIN: "Time will tell, sir."

From the Bulletin (Sydney).



IN SOUTH AFRICA, JOHN BULL'S DANCE OF TRIUMPH IS OVER CONCEALED CASKS OF POWDER.

From Der Nebelspalter (Zürich).



SOMETHING IN THE CLASSICAL LINE.

CARACTACUS DE WET (to Emperor Joe): "Why did you envy me my poor cottage in South Africa?"

JOE: "Because, my friend, Cohen told me your cabbage-garden crushed ever so many dwts. to the ton."

From the *Bulletin* (Sydney, N. S. W.).



"OUR BROTHER BOER."

This is the sort of thing that Joe Chamberlain is getting by the cartload from all over the "Empire" by cable: "At last night's meeting of Burwood Council the mayor moved: 'That the Burwood Council, having heard with great satisfaction of the declaration of peace, has great pleasure in welcoming the Boer population of South Africa into the aspirations and liberties which we as British subjects enjoy; and that this resolution be conveyed to the Boer leaders through Lord Milner.' Now that peace has been declared it should be recognized that the Boers were British subjects, and they should sympathize with them, inasmuch as they had suffered the loss of their country."

CHORUS OF SMALL FRY: "Are you sure you've got a hold on him, gov'nor? 'Cause we want to embrace our long-lost brother!"

From *Bulletin* (Sydney, N. S. W.).



From *Nederlandsche Spectator*
(The Hague).



"THE ANGEL OF PEACE."

His work is done, and spreading his wings he has left the shores of Africa once more. To think and act are with him synonymous terms. The verb "to do" he fully comprehends. The verb "to talk" has no meaning for him, and he leaves this function to the politicians. From North to South the name of Kitchener has brought peace to Africa, the firm and lasting *Pax Britannica*. And now that he has left us the people acclaim with one voice—*Bon voyage!*

From *Cape Register* (Cape Town).



"WAES HAE!"

From *Moonshine* (London).

THE THREE CARTOONS ABOVE SHOW LORD KITCHENER IN VARIED RÔLES.



ON THE MARCH TO WESTERN CANADA FROM CRAWFORD, NEBRASKA.

MIGRATION TO THE CANADIAN NORTHWEST.

BY CY WARMAN.

WHY do they "trek"? This is a question which many of my fellow-countrymen in the United States are now asking with regard to the stream of emigrants from the Republic to the Dominion of Canada. But yesterday the stream flowed the other way, and the people of Canada trooped over to the United States, thousands of them, every year. They settled on our vacant lands, they entered our workshops, they competed with native-born citizens of the United States for positions of trust in store and warehouse, and they took places of eminence in the professions, notably law and medicine.

Now the trek is to the north; the "balance of trade" is with the Canadians. It is not through any antipathy to American institutions that these hardy sons of the soil,—for the emigrants are notably the best type of agriculturists,—go forth to take up new homes in the sparsely settled great land of the north. The outgoers are men and women who have nothing but the kindest regard for the Republic and republican institutions. Many, indeed, leave their old homes in the United States with regret. In that respect they do not resemble the vast body of our fellow citizens who have come from the Old World. These foreigners rejoice to throw off the shackles of militarism and the cramping tyranny of autocratic rule so prevalent in European nations and welcome the institutions of the United States, which are devised to insure freedom and fair play to every citizen. The person who leaves

the United States for Canada goes to a land equally free, if not more free, in all that affects the lives of ordinary individuals. From the Republic, indeed, the Canadians have borrowed without stint in forming their constitution. For the sake of convenience in commerce, they long ago imitated our system of decimal currency. They have followed our methods of local self-government, have their township and city councils, local legislature, and central system of government, just as the United States have; the chief and almost only difference being the executive, which, in Canada, as in Great Britain, is a responsible cabinet with ministers having seats in Parliament, and amenable to the representatives of the people as a whole, and not simply to the chief magistrate.

THE UNDEVELOPED RICHES OF NORTHWEST CANADA.

Social and industrial reasons alone dictate the emigration. The desire of the emigrants is to better themselves. Within the past few years Canada has been discovered. She might have been discovered before, only the enterprising population to the south of the Dominion were too busy discovering the almost boundless resources of their own country, and bringing them into subjection, to permit of much time being devoted to their neighbors. Now, though there is yet, no doubt, much to do before it can be said of the United States that the opportunities for investing capital and employing labor are used up,

it is conceded that undeveloped Canada at present offers the best opportunity for the enterprising capitalist and the poor man willing to work. A hundred years ago the development of western Canada was begun. It was known to a select few that the territories lying between the Red River and the Rocky Mountains on the one hand, and the United States border and the Great Mackenzie River on the other, were marvelously fertile. But the handful of men who were cognizant of this fact were officers of the Hudson Bay and other great fur-trading companies, who had secured a monopoly of the land for the purposes of their industry, and who for generations had fostered the impression, which became world wide, that this enormous territory was a wilderness, cold, inhospitable, and unfit for the settlement of man, and only of use as a stamping ground for the fur-bearing animals.

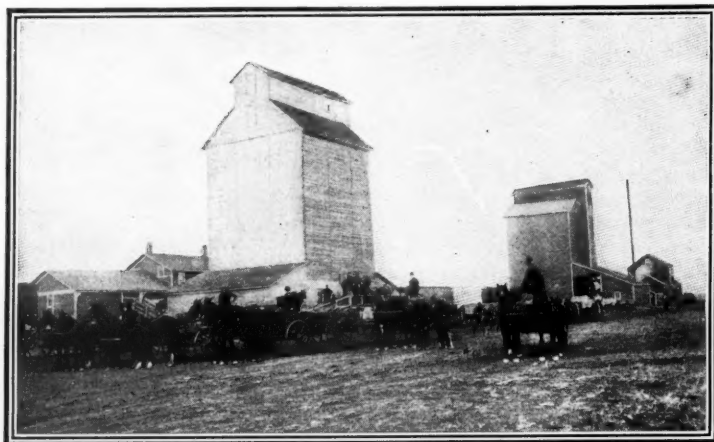
Even as late as 1879 there were many who regarded the late James W. Taylor, United States consul at Winnipeg, as an extravagant, oversanguine dreamer, because he foreshadowed a great future for the northern Dominion, and pointed out that three-fourths of the wheat-growing area of North America "is north of the boundary line between the United States and Canada. There," he added, "the future bread supply of America, and of the Old World too, will be raised." But Mr. Taylor, now dead for a dozen years, is being vindicated. Canadians, slow to appreciate the great wealth that has been lying dormant within their borders, have now been aroused to the importance of the development of their country, and people of the United States, ever keen for the almighty dollar, are cheerfully joining in the development.

VAST AREAS OPEN TO SETTLEMENT.

The settlement of Canada's vast vacant lands is, nevertheless, barely begun. There are, it has been ascertained, in northwestern Ontario, in the province of Manitoba, and in the territories of Alberta, Assinaboia, and Saskatchewan, at least 200,000,000 acres of farm lands: over 250,000 square miles of habitable territory, of which probably seven-eighths are as yet unoccupied. The possibilities are great, the outlook captivating to an adventurous American. Take Manitoba as an object lesson. It has within its bounds 47,332,840 acres, of which 6,329,000 are lakes and 1,300,000 in timber reserves, leaving 25,000,000 acres of cultivable land. Though last year only 2,952,002 acres of this territory was under crop, so great was the yield of wheat, barley, oats, and other crops in the province and neighboring territories that the railways were blocked for months, and every available means of transit by land and water are yet busily engaged in carrying the products of the phenomenal harvests to the world's markets. The Canadian Pacific Railway, to head off similar prospective conditions this season, has just obtained power from Parliament to add \$20,000,000 to its capital stock, of which one-half will be devoted to purchasing rolling stock and the other to providing new lines. These great crops and bright prospects have given an impetus to railway building in Canada, and whereas the Dominion was until recently contented with but one transcontinental line, the construction of another is now being rushed, to run several hundred miles north of the Canadian Pacific Railway, and a company has been chartered, and has already begun the building of a third overland line, which will open up the fertile lands of northern Quebec and Ontario, and pass to the Pacific Ocean through the rich plains of the Peace River region of northwestern Canada.

INDUCEMENTS TO THE AMERICAN FARMERS.

Now that land can no longer be had in the United States for the squatting on, and when even railroad lands bring big prices in the open market, the temptation which such a country as we have here described offers to the progressive American farmer is very

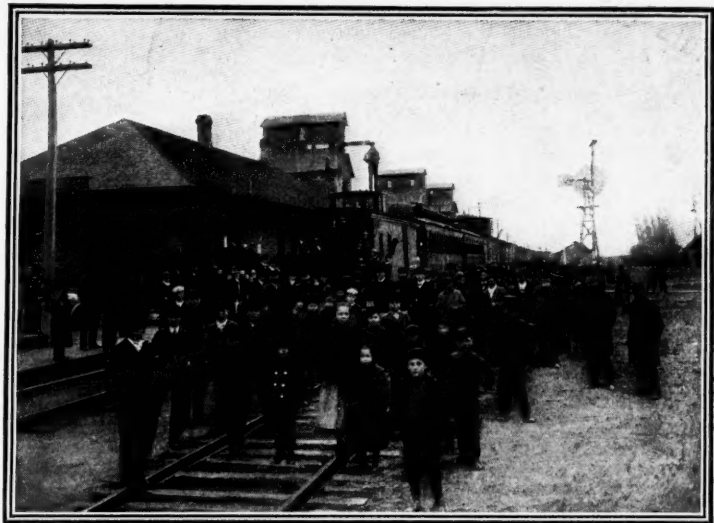


FARMERS DELIVERING GRAIN AT ELEVATORS.

great. If he has money, he can buy a good improved prairie farm in western Canada for very much less than his own holding will bring. If he has a wealth of grown boys, he can obtain free of cost to himself, and for every boy over eighteen years, a farm of 160 acres ready for the plough, and by united effort they can double their holdings by the yield of their labor in two or three years. This statement is not made at random. I have been over the territory, and have met with numerous instances of success in this regard. I knew a man who for a quarter of a century toiled on a stony, hard-to-work hundred acres in eastern Canada, and barely made enough to feed and educate his four sons and one daughter. He took the western fever, and settled west of Brandon, Manitoba, a few years ago. He sold his farm in Ontario, invested the money in adding 360 acres to his free grant of 160 acres; obtained 160 each for his three full-grown boys, and together they began to work this immense farm. The money borrowed at 10 per cent. to stock the place was all paid off in five years, and so well did the venture turn out that the daughter was sent to a ladies' college in Ontario to complete her education, and the boys, at the end of eight years, were able to take a trip to Europe. This is no exceptional picture of the successful prairie farming in Canada, and it accounts in some measure for the present rush to the northwest from all parts of the continent and from Europe. So the Yankee is trekking.

INFLUX OF AMERICAN CAPITAL.

Last year he crossed the border 20,000 strong. In the first four months of 1902 the number of emigrants from the United States was 11,480, and they brought with them to Canada over \$1,000,000 worth of property. As I write they are still pouring in, and it is expected that this year the number of new-comers from the United States will be more than double that of 1901. Nor are the emigrants from over the border entirely restricted to the farming population. All over the Dominion the enterprising "Yankee," as the people from the United States are called



A SOLID TRAIN-LOAD OF IMMIGRANTS FROM COTTONWOOD COUNTY, MINNESOTA, TO POINTS IN WESTERN CANADA.

in Canada, is in evidence. He is a controlling power in the iron-mining and smelting in the maritime provinces. He is heavily interested in the Ontario factories and mines. The great nickel industry at Sudbury, Ontario, the largest and most profitable of its kind in the world, is under his control. He is everywhere in evidence in the mining region of northwestern Ontario, and at Sault Ste. Marie he has established great iron smelting, pulp, and paper manufacturing industries. He is measuring the north-shore country like an army worm, hunting for iron ore. In the far-off Yukon he is cock-of-the-walk as a miner and speculator. He owns Canadian railroads, and wherever he goes he puts new life and energy into the community. In the awakening of the "Sleeping Empire of the North" the American sees his opportunity, for already great deals for the control of land grants given to railroad and other corporations have been arranged. Purchases have been made within the last few days of millions of acres of choice lands, and more are in negotiation, the speculators having in view in many instances the early settlement of the property by immigrants from the United States. These big holdings are relics of the old *régime* of speculation and railroad land bonuses, which are no longer in vogue. The government that has held power in Canada for six years came into office with a pledge to hold the public lands for the settler, and not for the speculator. They have kept their promises, and land cannot now be obtained from the govern-

ment except by bona-fide settlers, who do not get a deed until they build a house, cultivate some of their land, and remain in possession several years.

WHAT THE SETTLERS FIND.

Far-sighted Americans who desire to get hold of land for speculative purposes have therefore to deal with those who obtained big grants in the early days. Even that description of land has gone up in price. Within the last year the Canadian Pacific Railway Company, which has 16,000,000 acres of choice territory under its control, raised the price of much of it from \$3 to \$5 an acre, but this has not prevented the company from more than doubling its land sales in the last six months. At the present rate ten years will not have elapsed before all of its vast land grant, — larger than the whole of cultivated Ontario, — has been disposed of, and probably well settled. The Yankees cross a boundary line which is largely imaginary, and find a vast country with abundance of the very best grain-growing, cattle-raising, butter-and-cheese-making land for the taking up, if government territory, and for a mere song if the property of others. They find a land with a bracing, health-promoting climate, — cold at seasons it is true,

but just as enjoyable as to climatic conditions as the tier of States along its southern border, and withal conducing to longevity. With men, indeed, it is as with animals and cereals, the farther north they can be raised in comfort the better the quality, the more robust they are. Then, the fuel question has been solved, even for the Canadian prairie settlers. West of the Red River and east of the Rockies there is much wood, and where it is not easily obtainable there is plenty of coal. Over 65,000 square miles of coal lands, much of them under government control, are known to exist in the area named. New-comers from the United States find, too, that Canada is a country with institutions like our own, and with perfect security to life and property everywhere. Let me note that \$40,000 was spent by the Canadian authorities in tracking and bringing to justice a murderer who waylaid and killed two citizens of the United States who were coming out of the Yukon territory. It was a large sum, but when some one in Parliament asked the Minister of Justice for an explanation of it he said it was well spent, and would be spent again under like circumstances, for the Canadian Government was determined that life and property should be protected.



CUTTING WHEAT NEAR GRISWOLD, MANITOBA.

THE POLITICAL SITUATION IN ENGLAND AFTER SALISBURY.

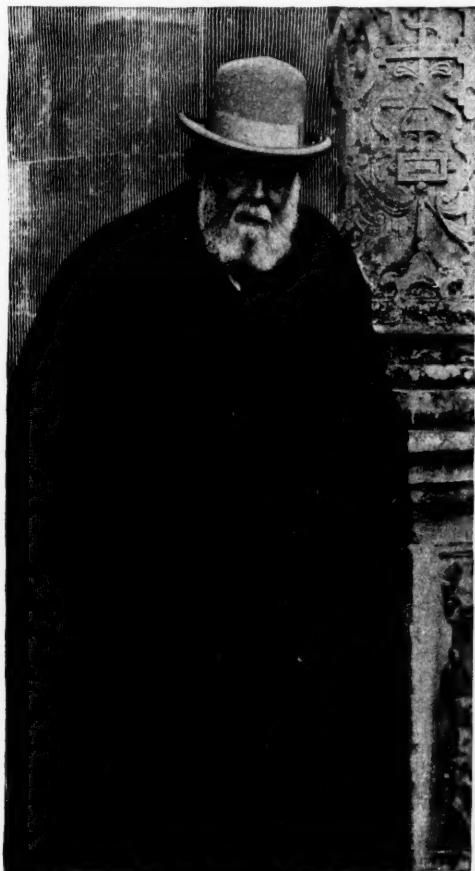
BY W. T. STEAD.

LORD SALISBURY'S disappearance has been received with extraordinary nonchalance by the British public. The passing of Lord Palmerston, Lord Beaconsfield, and Mr. Gladstone created a very deep and sincere emotion. Lord Salisbury's resignation, although he has been longer prime minister than any other Englishman of our time, has hardly produced a ripple in the stagnant waters of English political life. Mr. Labouchere's cynical phrase, that it was to him a matter of absolute indifference whether the uncle

or the nephew was head of the government, represents not unfairly the general impression. This spirit of apathy or indifference is probably due to two causes: first, that Lord Salisbury was in the House of Lords, not in the House of Commons, and although he ceases to be prime minister, he remains in the House of Lords. He has quitted the cabinet, it is true, but the cabinet is a body which does its work in secret. Its proceedings are never chronicled, and Lord Salisbury has concealed rather than advertised the important part which he has played as prime minister.

The second cause goes deeper. The stormy emotions generated by the war have left a certain flaccidity in the nervous system of the British public. A drum upon which Mars has been thumping with all his might for three years naturally makes little response to the gentle tapping of political incident. An eminent Indian scientist is publishing a book this autumn in which he demonstrates by a series of admirable, ingenious experiments the existence of what he calls "response in metals." He has discovered that what have hitherto been regarded as inanimate substances, such as iron and steel, are capable of response to influences to which they had hitherto been considered impervious. They can be made sick, for instance, with poison, and reduced to a condition of apparent death, from which they can be resuscitated or resurrected by the administration of antidotes. If metals are thus capable of response, it would be wrong to despair of a nation, even although for the moment it seems to be drugged into lethargy by the combined influence of material prosperity and war.

Whatever may be the cause, there is no mistaking the fact that Mr. Balfour's succession to the premiership has occasioned less stir than many political incidents of much less importance. Mr. Gladstone lived ever in the public eye. Week days and Sundays he was always doing or saying something which afforded material for newspaper comment. The public took the keenest interest in his books, in his porcelain, in his cutting down trees at Hawarden, in his reading the services at the parish church. He was a performer always in the glare of the footlights, whether in office or out of it. Lord



A RECENT PICTURE OF LORD SALISBURY.

Salisbury lived in comparative seclusion. If he did not direct the affairs of a world-wide empire from a hermitage, he governed it from Hatfield, and often for weeks together he would never leave his retreat, even for the purpose of meeting the diplomatic representatives of other powers at the Foreign Office. The Cecils are a world unto themselves, and if Lord Salisbury may not be exactly said to be one of those world-forgetting mortals by the world forgot, he lived and lives apart. Of late years his memory failed him, not for facts so much as for faces, and all manner of odd stories are current as to the mistakes which he made owing to his inability to distinguish between individuals. On one occasion a worthy wine merchant, who was invited to spend a week-end in a family party at Hatfield, is said to have been mistaken by the late prime minister for Lord Roberts. The delusion was so complete that, after opening the conversation at the dinner table, he carried his astonished guest off into the library, and insisted upon learning from his uninstructed lips exactly what he thought of the campaign in Africa. "Tell me," so the story goes,—"tell me," he said to the flattered but bewildered wine merchant, "what you really think of the war in South Africa. Will Lord Kitchener make as great a mess of it as all our other generals?"

The good man rose to the situation, and was rewarded by being anxiously asked by the prime minister what he would do if he were in South Africa at that moment. It was not until the following day that the guest was aware of the reason for the strange solicitude which the prime minister had shown for his opinion upon military tactics.

On another occasion he is said to have asked who that remarkably intelligent young man was with whom he had just been transacting business. "It is one of your private secretaries," was the reply. When a man forgets the face of a private secretary, and confounds wine merchants with commanders in chief, it is not surprising that he should find the time had come for his departure.

This, however, was probably accelerated by the difference with the King. Edward VII., when Prince of Wales, was never held in much regard by Lord Salisbury. There was a marked contrast in this respect,—which the prince was quick to appreciate and resent,—between the manner in which he was kept in the dark by Lord Salisbury and carefully informed of all that was going on by Mr. Gladstone. Rumor has it that the late prime minister deemed it his duty on at least one occasion formally to remonstrate with the King on matters which His Maj-

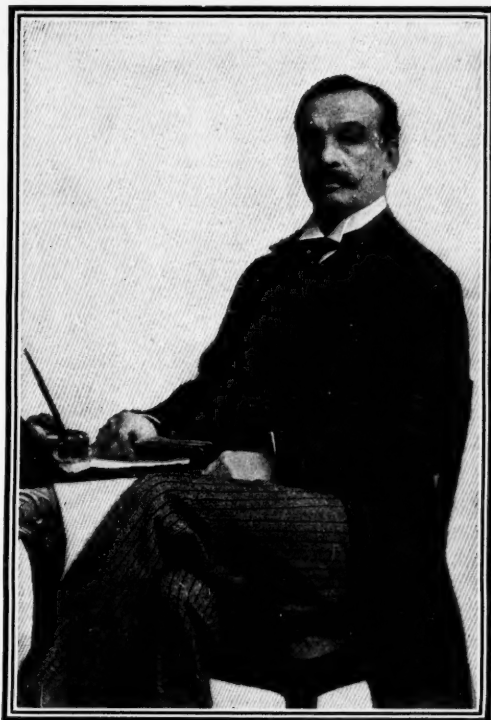
esty did not consider came within the scope of ministerial surveillance, and the difference is said to have culminated when the King insisted upon making an entirely different list of coronation honors from that which had been prepared for his acceptance by his ministers. Whatever truth there may be in these stories, the fact is that Lord Salisbury tendered his resignation on the first day on which the King could receive him after his operation. Something must have happened. Otherwise Lord Salisbury could hardly have quitted the stage on the very eve of the coronation.

So marked was the estrangement that Lord Salisbury fixed the day of his departure for France before the coronation. He was probably induced to remain over the ceremony by consideration of the scandal which his absence would have occasioned.

He has the satisfaction of seeing his nephew installed in the premiership, and leaving his party with an assured majority in both houses of Parliament. The one danger-point was the risk that Mr. Chamberlain might have asserted his own claims to the premiership. This was successfully averted, and Mr. Balfour entered upon his new functions with the formal and public benediction of his own possible rival. Mr. Chamberlain's claims were never strongly put forward, not even by himself. There are many reasons why it was impossible for him to have succeeded. The first was the fact that by universal consent he could not lead the House of Commons. The gifts requisite for managing that deliberative assembly are often possessed by persons with much less of character and debating ability than Mr. Chamberlain; but successfully to lead the House of Commons it is necessary to be a gentleman in the true sense of that much-abused word. This has nothing whatever to do with ordinary gentility. There were few more successful leaders of the House of Commons than Mr. W. H. Smith, who began life as a newsboy, and who ended it as a millionaire news agent. But by consent, even of his own friends, Mr. Chamberlain would be an impossible leader of the House. Even if he had possessed all the gifts and graces of Mr. Balfour, he would still have been impossible for another reason. Although in many respects he is more Tory than the Tories, he is nevertheless not a Tory by profession, but a Liberal Unionist. The Conservatives, who enormously outnumber the Liberal Unionists, acquiesce in the Duke of Devonshire's leadership in the House of Lords, but they would have resented it if the leadership in both houses had been vested in Liberal Unionist hands.

A third reason was the fact that Mr. Chamberlain as Colonial Secretary has plunged the empire into difficulties out of which it is his duty to extricate it—if he can. The difficulties are only beginning to be appreciated by Mr. Chamberlain. He allowed Lord Milner to bring on the war, believing all the while that President Krüger would never fight; and he has just now experienced as great, although not so conspicuous, a reverse in the collapse of his high-flying schemes for converting the colonies into a highly organized military empire. As in one case he reckoned without President Krüger, so in the other he reckoned without Sir Wilfrid Laurier and Sir Edmund Barton. Hence he may well feel reluctant to surrender the control of colonial politics to any other hands than his own. Had he become leader of the House, he would have undertaken a task for which he was not competent, excited jealousies within the party which might have rent it in twain, and he would besides have had to hand over the control of the South African settlement to new and possibly unsympathetic hands.

The moment it was known that Mr. Chamberlain supported the premiership of Mr. Balfour public interest in the crisis evaporated. It was only partially revived by the announcement of the approaching retirement of Sir Michael Hicks-Beach. "Black Michael," as he is called, is a long-legged Wiltshire squire, who, although Conservative by tradition, has never shown any sympathy with the heresies of his own party, which, for the most part, are nothing more than reversions to the primitive Tory faith. In nothing is this more conspicuous than in his dislike of Jingoism and his devotion to free trade. It is true that, although a man of peace, he consented to the war; and although a free-trader, he consented to the imposition of the corn tax. Nevertheless, no one—not even his worst enemies—accused him of doing either one or the other excepting by an act of violence to his own convictions. Between him and Mr. Chamberlain there has been very little love lost. The story goes that in the summer of 1899, before the outbreak of war, Black Michael observed grimly to one of his associates that he could not help feeling profound sympathy for President Krüger,—seeing that he had so much to do with Mr. Chamberlain. During the war time, once and again, it was announced that he was on the point of resigning; but like the lady who swore she would never consent, and consented, Sir Michael, while always swearing he would resign, never quitted office. He has not yet even abandoned the post of Chancellor of the Exchequer, and it is quite on the cards he may continue in office from the sheer inability of Mr. Balfour to find a presentable successor. There

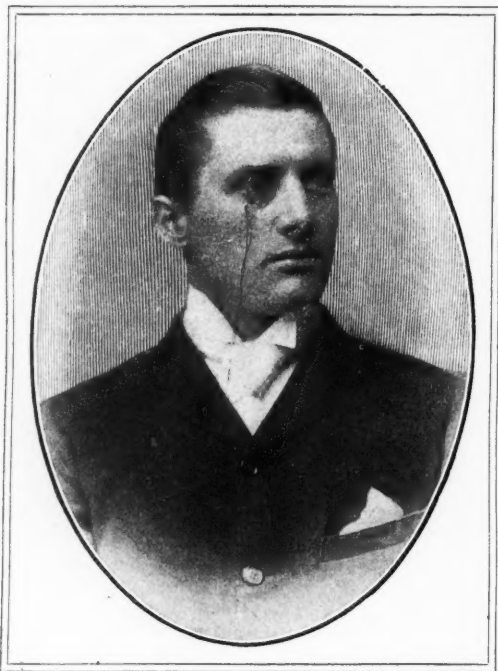


RT. HON. CHARLES T. RITCHIE, THE NEW CHANCELLOR OF THE EXCHEQUER.

has been some talk of putting Mr. Chamberlain in his place; but, apart from Mr. Chamberlain's reluctance to leave the Colonial Office, there is very little to tempt him in the succession to an office whose occupant must provide the expenditure of the war. According to the latest estimate of the Chancellor of the Exchequer, the war has cost Great Britain £228,000,000, of which only £75,000,000 have been paid out of taxation. The rest, £153,000,000, has been added to the national debt.

The news has just come that Mr. Ritchie, who has made a passable Home Secretary, is to be the new Chancellor of the Exchequer. He is a plain man of business, not much of an orator, who is probably the best man available for the post. His place at the Home Office will be filled, so it is said, by Mr. Akers Douglas, the present First Commissioner of Works. Mr. Akers Douglas has been very successful at the Board of Works, but now much of his success was due to his permanent under secretary, Lord Esher, and how much was due to his own initiative, is a doubtful point. Lord Esher will not accompany him to the Home Office.

The next change to be announced was the resignation of the Viceroy of Ireland, Lord Cadogan, a wealthy ground landlord of Chelsea. He had the one indispensable qualification for an Irish viceroy—he had money to burn. He has kept up semi-regal state at Dublin Castle, without giving any particular offense or making any par-



MR. AUSTEN CHAMBERLAIN, THE NEW POSTMASTER-GENERAL.

ticular mark. Although he represented Ireland in the cabinet, the real work of representation has always been done by his chief secretary, who has a seat in the House of Commons, and who will probably in the new administration have also a seat in the cabinet. Mr. George Wyndham, the present holder of the chief secretaryship, is a charming personage, who began political life as Mr. Balfour's private secretary, and who acquired some of the easy nonchalance of his chief. He is a man of letters and of wealth. He served with distinction at the War Office, but as chief secretary he can hardly be said to have distinguished himself. He meant well, but the permanent forces of reaction were too strong for him. It is possible he may be transferred to another post.

As the premiership remains in the hands of the Hotel Cecil, it was necessary to strengthen the representation of the Chamberlains in the

cabinet. Mr. Austen Chamberlain, who has displayed good business-like capacity as Financial Secretary to the Treasury, has been appointed Postmaster-General, with a seat in the cabinet.

Mr. Austen Chamberlain will have an opportunity of showing what can be done by the British post office in promoting the extension of British trade, and of facilitating intercommunication between the ocean-severed members of the English-speaking race. If he would but take up and carry out the programme of Mr. Henneker Heaton, he would render good service to the community. Lord Londonderry, his predecessor, has resigned on promotion, but at the moment of writing his new post has not been announced. He might return to Dublin Castle, but the viceroyship is said to be promised to Lord Dudley.

Another resigning minister is Lord James, of Hereford, who made his mark as Sir Henry James, but who has done little or nothing since he was raised to the peerage. He is seventy-four years of age and a Liberal Unionist. He vacated the Chancellorship of the Duchy of Lancaster, which is filled by Mr. W. H. Walrond, who for some years has been chief whip of the Unionist ministry. With the exception of Lord James, the other elder men cling to their posts.

The cabinet is still overladen and unwieldy. But cabinet ministers, especially when they are over seventy, shrink from resignation, which appears to them almost as the countersigning of their own death warrant. Lord Halsbury, the Lord Chancellor, who is seventy-seven on Sep-

tember 3, and Lord Ashbourne, who is sixty four, the Irish Chancellor whose name lives in connection with the Ashbourne Act, the first measure passed for the purpose of enabling the Irish peasant to convert himself into a proprietor by the aid of state credit, are both mentioned in the newspapers as seniors whose places might well be left vacant or filled by younger and more energetic men.

The colonial conference, which was intended to crown the edifice of Mr. Cham-



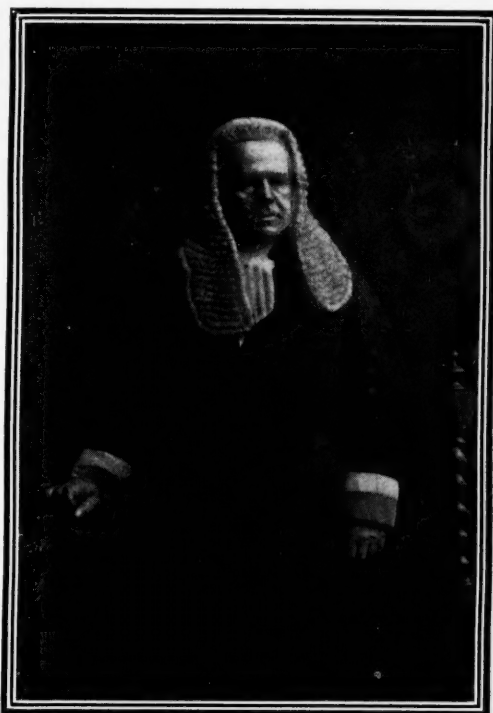
THE EARL OF CADOGAN AS LORD LIEUTENANT OF IRELAND.

berlain's ambition, has brought about the utter destruction of his ambitious schemes. As the proceedings of the colonial conference are private, very few people even in England are aware of the extent to which his hopes have been blighted. He had built a showy house of cards, and the colonial premiers have blown upon it, and the cards are now all lying in a shapeless heap on the ground. The chief credit for this remarkable achievement belongs to Sir Wilfrid Laurier, the Prime Minister of Canada.

When Mr. Chamberlain summoned the colonial premiers to London, it was with the object of securing their assent to a great scheme of Imperial military and naval organization, which would have bound all parts of the empire together in a *kriegsverein*. The *zollverein* idea had been abandoned as hopeless, and an Imperial Council in London was soon seen to be out of the question; but they pinned all their hopes upon the *kriegsverein*. Now, the First Lord of the Admiralty and the Secretary of State for War duly submitted their schemes to the colonial conference, only to have them rejected without ceremony. As Americans have some not unnatural alarm as to the possible consequences of the new departure which was taken when the Canadian contingents were dispatched to the seat of war in South Africa, it will be eminently reassuring to them to know that the attempt to use this as a precedent, or to construct upon it an obligation, has been peremptorily rejected by the representative of Canada. Sir Wilfrid Laurier has been resolute from first to last not to enter into any undertaking that would in any way involve Canada in the vortex of militarism, or, to use the phrase which he employed while speaking to me, in the military system of the Old World. Canada reserved her right, just as if she was an independent sovereign international state, to decide whether or not she will take part in the wars of the empire, or whether she will stand aloof; and Sir Wilfrid Laurier shows himself as zealous against involving the New World in the quarrels of the Old as if he had been a thorough-going advocate of the Monroe Doctrine.

With Sir Wilfrid Laurier stood Sir Edmund Barton, the representative of the commonwealth of Australia, and the opposition of these two men paralyzed the rampant Jingoism of Mr. Chamberlain. He is endeavoring to put as good a face upon it as possible, but his more candid supporters do not conceal their chagrin. The *kriegsverein* is dead, and Sir Wilfrid Laurier has killed it.

Only one of the colonial premiers, Mr. Seddon, of New Zealand, showed any disposition to support Mr. Chamberlain in his project of convert-



LORD HALSBURY, LORD CHANCELLOR.

ing the loosely knit alliance of independent commonwealths into a fighting empire, and Mr. Seddon to-day is a disappointed and disillusioned man. So much disappointed is he that it is probable he will only return to New Zealand for the purpose of abandoning his premiership, and of transferring his energies from the political to the financial world. Mr. Seddon, in short, is going to quit New Zealand politics, and take to money-making in Johannesburg. So passes away Mr. Chamberlain's dream.

Another remarkable fact which will not fail to be appreciated abroad, is the extraordinary popularity of the Boer generals. Gen. Lucas Meyer, whose sudden death in the Hague was announced in August, had never had such a good time in his life as he had in the last week. He had been fighting England for the last two and a half years, and on his arrival he was simply lionized,—not by the pro-Boers, but by the representatives of the government. He was banqueted and entertained in town, and has been an honored guest in the country house of at least one peer and member of the ministry. He lunched with Mr. Chamberlain, and, *mirabile dictu*, the King invited him to Sandringham if

he returned to England after his cure at Carlsbad. Alas! that visit will never be paid.

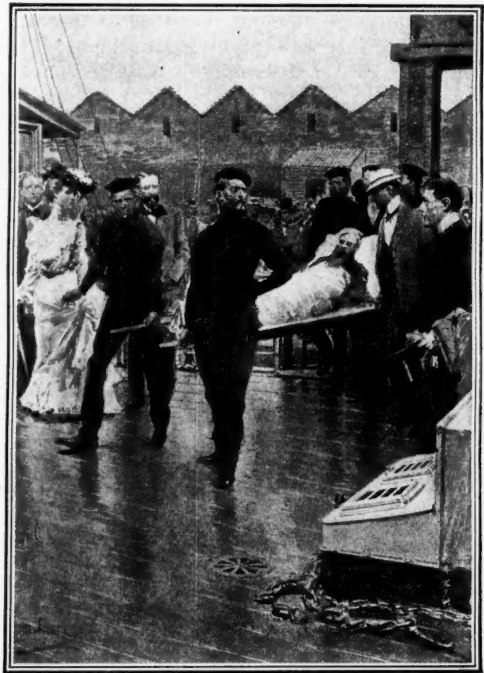
Gen. Lucas Meyer, it may be said, was always in favor of peace, and opposed the war, although he bore himself gallantly enough in the fighting. But it was arranged that when Generals Botha, Delarey, and De Wet arrived at Southampton, they should be accorded a royal reception. At the Cape they had been received with an enthusiasm which knew no bounds, and it seemed that in England they would be welcomed quite as heartily as by the Dutch.

Mr. Steyn, the heroic president of the Free State, who also arrived from South Africa in August, was conveyed direct to Holland, without tarrying on British soil. This was due solely to the state of his health. He also would have been welcomed with enthusiasm, but he is paralyzed in his limbs, and it was thought dangerous to subject him to the double railway journey from Southampton to London, and from London to Harwich, to say nothing of the driving across London. Mr. Fischer came over from Holland to meet his President. It was the first visit he had paid to England since the war. In talking to him about the compensation for private property which had been destroyed, under the plea of the necessity of war in the republics, he made a very acute suggestion.

"Your ministers," he said, "have officially declared that only 680 farms have been burnt in South Africa before the decree was issued that farm burning had to be stopped. Since then they declared that only a very few farms have been destroyed. Suppose that we take it that the very few is 120. In that case, according to the official information given to the world, only 800 farms will have been destroyed. We are quite willing to waive all claim for compensation for these 800 farms, which are the only farms officially admitted to be destroyed, if, in return, you will rebuild and restock all the farms which an investigation will prove have been really destroyed by your troops in South Africa."

Mr. Albert Cartwright, the editor of the *South African News*, is returning to Africa to resume the editorship of the paper, which had ceased to appear on the declaration of martial law in Cape Town. Mr. Cartwright and Dr. Jameson are traveling to South Africa on the same ship, together with Mr. Alfred Beit, who, since Mr. Rhodes' death, may

be regarded as the leading representative of the South African financial magnates. When they reach Cape Town they will find that, owing to the inexcusable folly of Lord Milner in promoting an agitation for the suspension of the constitution, Sir Gordon Sprigg, the Cape premier, will be at the head of a strong parliamentary majority, chiefly composed of members of the Afrikaner Bund. Therefore, if you add to all these facts the evidence afforded by the North Leeds election, where a Tory majority of 2,500



EX-PRESIDENT STEYN LANDING AT SOUTHAMPTON.

was converted into a Liberal majority by 758, and the secession of Mr. Wason, who is the member for the Orkney and Shetland group, and who has publicly repudiated the party he was elected to support, and has thrown in his lot with the Liberals, you can understand some of the reasons why the Liberals are beginning at last to believe that the star of Chamberlain is waning, and that in a very short time the British public will have regained its equilibrium.



BARON YEIICHI SHIBUZAWA, THE CREATOR OF INDUSTRIAL JAPAN.

BY STANHOPE SAMS.

THERE visited this country in June and July the master-builder of the present commercial and industrial splendor of Japan, Baron Yeichi Shibuzawa.

The Japan we know to-day is less than half a century old. Students of art and of literature know a much more ancient country; but the rival of America and England in the commercial conquest of the East, who sends her ships into every port, and her trade commissioners into every nook and cranny of the globe, was created by the present generation. Thirty-five years ago, when Japan had been thoroughly aroused, when the Shogunate and feudalism had been shattered, and when the young "Mikado,"—half-god, half-man,—had been brought triumphantly by the forces of progress from the seclusion of the temple, and made all man, and Emperor, and leader of his people, the patriotic minds of the nation saw visions of future greatness and magnificence. While many dreamed of military and political glory, Yeichi Shibuzawa saw a power and greatness born of peace. He saw that the future held for his country the greatest opportunity ever offered to a people that were conscious of it and able to grasp it.

The moment that Baron Shibuzawa landed on our shores, the press hailed him as the "John Pierpont Morgan of Japan." This characterization, which contains only the usual half-truth of the newspaper, is at least suggestive. The truth is that while Baron Shibuzawa's present position in Japan somewhat resembles that of Mr. Morgan in the United States, inasmuch as each is the greatest business organizer and leader in his own country, the careers of the two men present a remarkable contrast. They chose widely separated paths, and the aim of the Japanese was far different from that of the American. Mr. Morgan chose business as a career; Baron Shibuzawa chose it as the best means for promoting the welfare of his country. The great American financier has contributed largely, but indirectly, to the prosperity and advancement of his country; the great Japanese financier has contributed even more largely, and directly, to the prosperity and advancement of Japan. In the one case, the benefit to the country was an incident; in the other, it was the high and governing purpose.

It is only in Japan, among the countries of the modern world, that a career so varied as Baron Shibuzawa's is possible. Born in 1840, in Musashi province, the province of Tokyo, as a youth he attached himself to the powerful "clan" of Lord Hitotsubashi, of the great Tokugawa family. In this service his creative and organizing genius found a splendid field. He established a new and effective military system, and reorganized the unsettled finances of the clan. These reforms led to the advancement of the Hitotsubashi. Lord Keiki became Shogun, and Shibuzawa was made an officer of the government. After a visit to France, in 1867-68, to study Western civilization,—during which "the Restoration" was effected at home,—he was appointed tax controller of the Financial Department of the new Imperial Government. He rose rapidly, becoming successively assistant Vice-Minister, Junior Vice-Minister, and Vice-Minister of Finance. Unquestionably, the highest positions in the gift of the Emperor were within his grasp. Suddenly, he gave up this brilliant life. Its splendid prizes no longer lured his ambition. He saw a new light. Not military glory, but solid prosperity, wealth, civilization, and culture are the real foundation of a nation's greatness.

AN INDUSTRIAL ORGANIZER.

Though trained to arms and statecraft, he abandoned a high career, and began to realize his vision of a new Japan. He planned, he labored, he organized. He won the confidence of all, and was acknowledged as a leader in an industrial revolution whose consequences were to be far more important than were those of the "Restoration," the most luminous hour in Japanese history. It is largely due to his directing and masterful genius, which embraces all fields of industry, that to-day the industrial and commercial development of Japan is the wonder of the world; that highways of steel are laid between her great cities; that the exquisite products of her craftsmen are known in every household of the West; that her merchant fleets cover the Pacific and Indian oceans; and that her people have been brought abreast of modern culture and civilization, and are prosperous and happy. It

was largely due to him that Japan deliberately set aside dreams of military glory, and chose the sober triumphs of peace.

"I realized," said the baron, in speaking to the writer of the hour when he decided to break with tradition,—*"I realized that the real force of progress lay in actual business, not in politics, and that the business element was really the most influential for the advancement of the country, so I gave up my political position and devoted my life to business, in which I have continued until to-day. I soon came to the conclusion that the capital of an individual was not enough to accomplish very much, and I then became the means of introducing the company system into Japan. The idea was successful, and the government approved it. Since then I may say that every industry in the country has increased,—some twenty times, some ten times, and none less than five times."*

Baron Shibuzawa shows in his bearing and conversation the manner in which he won his great successes. While sitting, he seems to be about the average height of Americans; but standing, it is seen that he is much shorter. He is, indeed, about five feet and one inch in height,—the stature, by the way, of so many prominent Japanese that it is commonly said of them that they belong to the *"Five-and-one Club."* The baron's erect and confident bearing, however, creates a distinct and flattering illusion as to his height.

His head, large and fully rounded, and his broad, athletic shoulders, of leonine structure and suppleness,—the legacy of his Samurai training,—really constitute the man. His face, which in a photograph does not seem very foreign, is highly characteristic of the best type of Japanese manhood. It is wide and full, and crowned by a broad, liberal, overtopping brow. His eyes are small but piercingly keen, though soft and expressive in conversation. For there seems to be in all things Japanese,—whether it is art, or man, a flower-picture, or the face of a hero, or of a strong master of trade,—something essentially feminine and tender, which softens and adds an indefinable and elusive charm to all ruggedness of form and character. The baron meets all men as equals. There is no hauteur or stiffness, and he talks without the palpable reserve so common and so disagreeable in men who have fought their way through difficulties. One may clearly see here the sincere complaisance that wins the good will and confidence of others, and which must have counted for much in the baron's vast enterprises, where many clashing interests had to be brought into harmony and coöperation.

It was while he was still an imperial minister,

thirty years ago, that he undertook the tremendous task of organizing the industrial life of a nation of 40,000,000 people. In this day, when the great captain of industry and the successful merchant and manufacturer are honored members of the highest social orders, it should not be forgotten that in Baron Shibuzawa's day, in Japan, to enter the class of merchant and manufacturer was to lose *"caste,"* and to forfeit all social rank. The man of affairs was despised. But the ardent reformer in turn despised all such distinctions as empty, unjust, and dishonoring to the nation. He made the sacrifice, became a merchant, and sank to the level of a lower caste. Then he proudly uplifted that caste, by his own deeds and by the deeds he inspired in others, until its members were called into the Emperor's Council Chamber, and Mutsu-hito, wisest ruler in the world to-day, felt honored in making them lords and peers of his realm.

JAPANESE SHIPBUILDING.

His first work of organization was naturally in the field of shipbuilding. Japan, an island empire, must have merchant fleets. Her old life had been confined within her own shores; but now the sea was to her what it had been to Phenicia and England. Let us see what she has accomplished.

When Baron Shibuzawa started the shipbuilding industry in Japan, there were no vessels to carry the Japanese merchant flag, save a lot of worthless junks. A few small ships had been bought in Europe, but there was no shipbuilding, no native dockyards. By 1890, 586 steam and 865 sailing vessels, a total of 1,451, and nearly every one home-built, bore the flag of Japan. More shipbuilding and dock companies were organized, and splendid vessels were constructed, at a rate unequaled perhaps, in the annals of shipbuilding. By 1900 there were 1,321 steam and 3,850 sailing vessels, a total of 5,171, or an increase of 3,720 ships in ten years, or nearly 400 per cent. Such were the magnificent results in a single field of his genius for organization.

BANKING AND FINANCE.

His next step was to organize the banking and financial system of Japan. This, he saw from the beginning, was necessary, as without organized capital there could be no organized industry. At that time there was not a bank in the Japanese empire. In 1873, he organized the first Japanese national bank, now known throughout the financial world as the Dai Ichi Gingo, literally *"Number One Bank."* Of this present institution he still remains president.



BARON YEIICHI SHIBUZAWA.

It was in the early days of his business career that Baron Shibuzawa felt the lack of trained men of affairs in Japan. A well-trained body of workers was as essential as organized capital. And so he founded a commercial school at Tsukiji, which has long been a famous institution, and from which have come many of the ablest business men and financiers of the empire.

His visit to France in 1867-68 gave him an opportunity to study the peculiarly modern and western method of organizing the business of a city as shown in boards of trade and chambers of commerce. The plan of a chamber of commerce at Tokyo, the new capital and business metropolis of the empire, was its immediate re-

sult, and he was able to carry this plan into effect in 1878. No sooner was the Tokyo Chamber of Commerce organized in that year than other cities, stirred into new life by the great events of the time, began to emulate the business enterprise of the capital, and a hundred and more commercial bodies were formed.

Preceding by many years the master stroke of Mr. Morgan in forming a great "shipping combination," Baron Shibuzawa combined his own original steamship company with its rival, the Kyodo Unyu Kwaisha, and again merged both these lines, together with others, into the Nippon Yusen Kwaisha, one of the largest and most splendidly equipped steamship companies in the world.

RAILROAD-BUILDING.

The railway, as the only means of developing the interior of the country, soon engaged his attention. This, at first, demanded too vast an outlay of money for a nation of farmers and fishermen with little hoarded wealth, and even when it was introduced the government made the deplorable mistake of adopting, presumably for economic reasons, the "narrow gauge" system, which has hopelessly complicated and trammelled railway development ever since. The government constructed the line between Tokyo and Yokohama, 18 miles long, in 1872; and a private line, 63 miles long, was built in 1883.

Baron Shibuzawa devoted much time, attention, and money to extending the railway system so that it would furnish an artery from the capital to every important city in the main island, or Hondo. The development was rapid in both the government and private system. In 1890, the government lines were 551 miles in length, and private lines 896 miles,—a total of 1,447 miles. In 1900, the government lines had grown to 1,010 miles, and private lines to 2,905 miles,—a total of 3,915 miles.

In 1890, the income of the government railway lines was 4,213,804 yen, the profits being 2,212,531 yen; while the private lines had an income of 4,360,478 yen, with profits of 2,793,801 yen. In 1900, the government lines had an income of 15,920,385 yen, with profits of 8,819,277 yen; while the private lines had an income of 31,059,696 yen, with profits of 15,662,243 yen. Baron Shibuzawa is now president of four railway systems.

These are only a few of his great projects that have made or are the history of modern Japan. These enterprises extend over the thirty-five years of Meiji,—the official designation of the reign of the present Emperor,—and stretch on into the future, when they will serve as foundations of Japan's commercial empire in Formosa, China, and Korea. For to his initiative and tireless persistence is due the construction of the Seoul-Chemulpo and the Seoul-Fusan railways in Korea, and the organization of banking and industrial associations in Formosa, Korea, and China.

ACTIVE IN ONE HUNDRED AND FIFTY CORPORATIONS.

Perhaps no other organizer has ever been engaged in so many and various enterprises. The lay mind is confused and dazzled by such multiplicity of details. A Japanese admirer has counted and tabulated the organizations and companies of which the baron is either the head or the guiding spirit. They number some one hun-

dred and fifty concerns, and include every kind of business that Japanese industrial and commercial life has evolved, every manifestation of civic and national interest in the development of the country, and every form of charity and philanthropy.

One of the chief factors of Baron Shibuzawa's success is his clearness of vision. He is never blinded by illusions. He believes that the time will come when Japan can measure stride, in a commercial and industrial sense, with the greatest of her rivals,—America, England, and Germany,—but that time is not yet. If others had understood as well as he the limitations of Japan, the country would not have been plunged into that reckless investment of capital which followed the successful war with China, and which so terribly crippled the national resources. His counsel of caution was not heeded, and for several years the nation faced bankruptcy because of its very prosperity. It had sunk its capital in investments that were certain to pay big dividends in two, three, or four years; but in the meanwhile it would have to go borrowing, or starve in the midst of its immobile wealth. All this Baron Shibuzawa foresaw, but could not prevent. In the sharp competition with nations of the West, he also clearly recognizes the limitations of Japan.

"The time will come," he said to the writer, "when Japan will be able to compete with the countries that have long occupied the field, in all lines of manufactured goods, but this time must necessarily be distant. The trouble at present is that while the Japanese can imitate everything, they cannot yet invent superior things."

It was the American's ability "to invent superior things" that drew him to the United States. European civilization and industrial life he had studied at the commencement of his own business career. It has hardly advanced since then. The new life of industry was to be found in the United States. Here he would see that inventiveness and resourcefulness which is conquering the world of trade. He came, and found it more wonderful than he had imagined. The whirl of machinery, the roar of our great maelstrom cities, bewildered him.

"What in America has impressed you most?" I asked.

"The substitution of the machine for the man," he replied.

In recognition of his great services to the nation the Emperor has made him a baron and a peer of the realm,—the first time in Japanese history that such a dignity has been bestowed upon a private man of business.

OLIVER WENDELL HOLMES, JURIST.

BY GEORGE PERRY MORRIS.

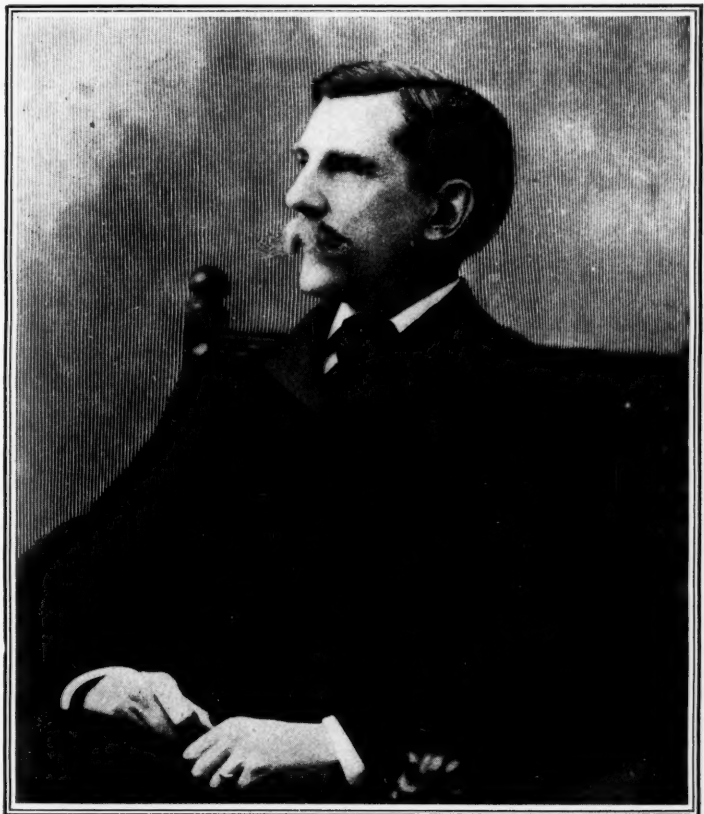
OLIVER WENDELL HOLMES, the doctor and poet, was short in stature and had a jaunty air befitting so mirthful and witty a man. Oliver Wendell Holmes, 2d, present Chief Justice of the Supreme Judicial Court of the Commonwealth of Massachusetts, and appointed by President Roosevelt to be Mr. Justice Gray's successor on the bench of the Federal Supreme Court, is tall in stature and gaunt and solemn, albeit not without much of his father's wit and humor, but far more strenuous a worker and liver than his father was, and less optimistic and more of a stoic. The strenuousness of his professional life, the stern grappling not only with the facts of this but the mysteries of the next world, and the constant struggle of a not over-strong physical frame to carry the burdens imposed by an insatiably hungry intellect, an imperious will, and tender heart, have left their marks on face and form.

As the son of a man who was both physician and poet, scientist and man of letters, Chief Justice Holmes,—for such he must be called still, until in rising he takes the simpler title of "justice" again,—reveals in all he says or writes that he has both the poet's amplitude of feeling and love for and use of symbolism, and the scientist's reverence for truth and facts, his method of ascertaining truth, and his stern joy in accepting it when found, be it ever so disillusionizing. Sometimes the poet in him is ascendant; at others the rationalistic scientist; at all times he has the art of stating his thought in a way that justifies the opinion that he is a facile, brilliant prose stylist.

Like the Higginsons,—H. L. and T. W.,—Robert

Gould Shaw, Charles Russell Lowell, and so many others of the flower of Massachusetts' intellectual and social aristocracy, young Holmes went from Harvard's classic halls in 1861 to fight for his country in the Civil War, and he returned a hero, having been thrice wounded, and having been brevetted major, lieutenant-colonel, and colonel in turn for gallant and meritorious action in the battles of Ball's Bluff, Antietam, and Chancellorsville.

The experiences of this portion of his life have so interpenetrated his being that his judicial decisions, his after-dinner speeches, his eulogies of



CHIEF JUSTICE OLIVER WENDELL HOLMES, OF MASSACHUSETTS.

(Appointed by President Roosevelt to succeed Justice Gray in the United States Supreme Court.)

departed friends, his conversation at the club, are all both adorned and illuminated by martial figures of speech and ideals of a soldier's sense of duty and honor. Indeed, so much does the idea possess him that the soldier's proffer of self for country is of all acts the noblest, that in a passage of singular impressiveness and poignancy, in which he reveals his general agnosticism as to the meaning of the universe and his fear lest all life be illusion, he adds this one fact of which he is sure,—namely, “that the faith is true and adorable which leads a soldier to throw away his life in obedience to blindly accepted duty, in a cause which he little understands, in a plan of campaign of which he has no notion, under tactics of which he does not see the use.”

Like all gallant gentlemen soldiers, young Holmes had while fighting, and now has, sincere respect for his foes—for their honor and for their bravery. “The soldiers of the Civil War,” he says, “need no explanations; they can join in commemorating a soldier's death with feelings not different in kind, whether he fell toward them or by their side.” Indeed, it is expressly to the “noble enemies” in Virginia, Georgia, and on the Mississippi that he credits his learning a philosophy of life thirty and more years ago, which he still holds, and which may perhaps be quoted as expressing his point of view of human life as well as anything which could be cited, although it lacks some of the negations and questionings of characteristic *obiter dicta*, which also might well be quoted were there space.

In the strife with Southerners during the Civil War he says that he learned :

That the joy of life is living, is to put all one's powers as far as they will go; that the measure of power is obstacles overcome; to ride boldly at what is in front of you, be it fence or enemy; to pray, not for comfort, but for combat; to keep the soldier's faith against the doubts of civil life, more besetting and harder to overcome than all the misgivings of the battlefield, and to remember that duty is not to be proved in the evil day, but then to be obeyed unquestioning; to love glory more than the temptations of wallowing ease, but to know that one's final judge is one's self.

Feeling thus toward the Southern soldier and the cause for which he fought, the South need have no fear that cases coming before the Supreme Court for adjudication in which the Southern point of view is involved will not have a fair hearing. Grant was more of a friend to the South than Stanton the administrator or Sumner the legislator, and Kitchener has done more to make racial unity possible in South Africa than Milner. So Holmes, who fought the South, will judge the South better than Hoar, who knew it only from afar.

In describing the sensations of a soldier's life, Chief Justice Holmes has the gripping, realistic power which Stephen Crane strove after, but with the advantage over Crane of having undergone what he describes; and as one reads the brief, vivid, unforgettable word-pictures of his military career, which Chief Justice Holmes has again and again painted for the benefit of veterans of the Grand Army, or for youths at Harvard, or for disciples in the law, one cannot but wish that he might have found time from his professional toil to have painted on a larger canvas, in the form of fiction, a story of the Civil War, in which his rare powers as an analyst and as a stylist might have found opportunity for full expression.

A man whom “Fate's dark opacity” has made a calm awaiter of personal Destiny,—as much so as ever Omar the Persian or Marcus Aurelius the Roman were,—and a man to whom the martial virtues are the highest, and a jurist who believes that “the present has a right to govern itself so far as it can,” and to whom “historic continuity with the past is not a duty, it is only a necessity,” is not likely to balk at the word Destiny when applied to national policy, or to draw back from a course of action for the nation which involves possible war, or to be over-much obedient to past interpretations of the Constitution, if it seems to be necessary to adjust judicial decision to the present need, as interpreted by popular vote or by legislative decree. It is natural that there should be speculation as to what course Justice Holmes will follow, after he ascends the Supreme Court bench, in passing upon the military, diplomatic, and legislative history of the nation since 1898, so far as it is amenable to judicial interpretation. One does not need to know how far he was “sounded” by the President ere the appointment was made to be quite certain that he will not prove reactionary or obstructive.

President Roosevelt himself is not a more confirmed advocate of the strenuous life than Chief Justice Holmes. Both his own thrilling joy in the struggle of the Civil War, the passion of which still seems to him most glorious, and his domination by the scientific temper of his day, lead him to say that “the struggle for life is the order of the world, at which it is vain to repine. . . . Sooner or later we shall fall; but meantime it is for us to fix our eyes upon the point to be stormed, and to get there if we can. . . . We need it (strife or war) everywhere and at all times, for high and dangerous action teaches us to believe as right beyond dispute things for which our doubting minds are slow to find words of proof. Out of heroism grows faith in the

worth of heroism. The proof comes later, and even may never come. Therefore I rejoice at every dangerous sport which I see pursued." It is for uttering such sentiments as these to Harvard students on patriotic holidays that Chief Justice Holmes, along with President Roosevelt and Senator Lodge, has incurred the ban of the coterie of the academic circle, which deprecates extolment of the martial virtues or emphasis on athletics.

Of course no man born, bred, and educated as Chief Justice Holmes has been could or would undervalue the intellectual side of life; and he will bring to the Supreme bench not only capacity for prodigious industry, but learning, brilliant penetration, still more striking gifts of expression, a theory of law "which draws its postulates and its justification from science," and a knowledge of anthropology, economics, penology, and allied themes which few, if any, judges now on the bench possess. But neither his intellectual attainments nor his occasional exaltation of intellect above feeling can obscure the fact that he is fundamentally a man of feeling. Life for him is forever being seen and defined in terms of passion and action, not of reason and contemplation. A bench full of such judges would be dangerous; a bench adorned and supplemented by one such may somehow seem less distant and superhuman and coldly abstract than it often seems to be now. When human sympathy, a stern sense of duty, moral courage to run counter to precedent, and to declare the feelings and hopes of men are joined in one person with intense hunger for facts, the ideal of science in formulating generalizations, long experience,—Chief Justice Holmes ascended the bench in 1882,—and a very vivid, realistic, human way of formulating opinions, then a judge of exceptional quality is at hand. And such a one is the subject of this sketch. The masses are quite right in feeling that his judicial opinions on the Massachusetts bench have shown him to be one who will conserve the rights of man as well as those of property; and if it be the policy of the administration to use the powers of the executive department to curb the undue power of vast aggregations of property, it is most fortunate that the federal judiciary in its highest court is about to be reinforced by one who has remained a democrat amid surroundings making for distrust and contempt of the masses.

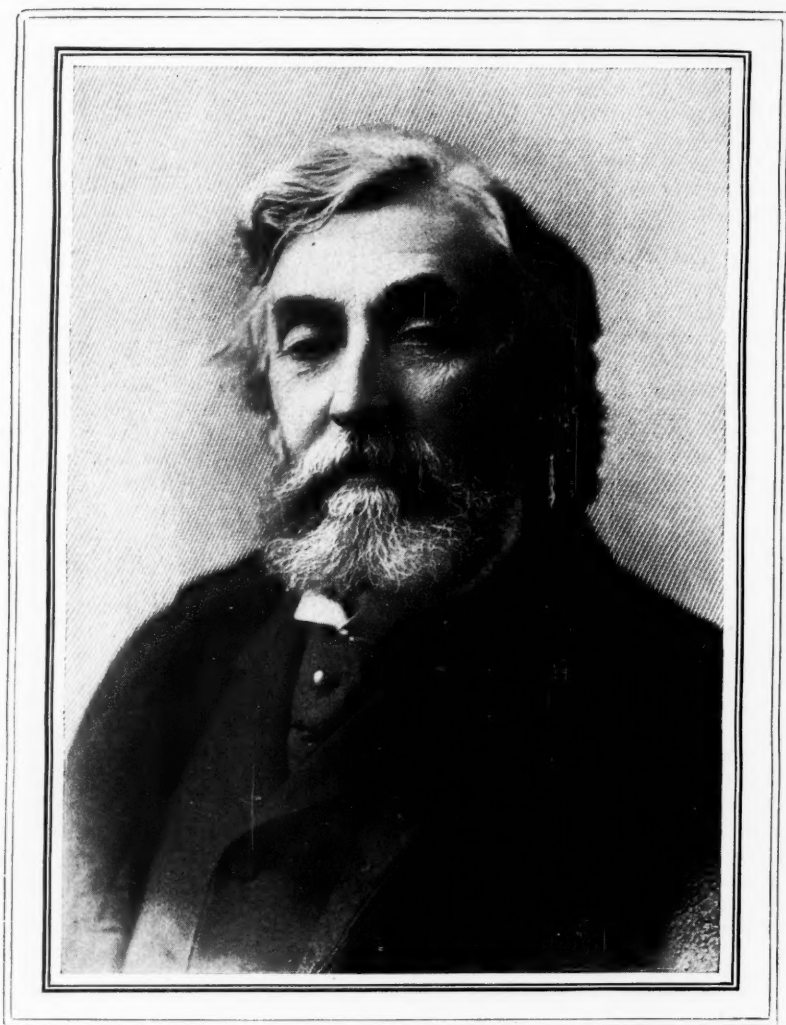
That Justice Holmes will now and then, in the future as in the past, say audacious, unconven-

tional words is to be expected. The man who can tell Harvard alumni and undergraduates assembled in Memorial Hall that all that Harvard did in the Civil War was "to send a few gentlemen into the field who died there becomingly," or who can tell graduates of the Law School assembled in honor of Prof. C. C. Langdell that none of them can deny that half the criminal law does more harm than good, and who, at the Supreme Judicial Court of Massachusetts' ceremony in honor of John Marshall, ventured to intimate that Marshall's work as a judge proved nothing more than that he was "a strong intellect" and had "a good style, personal ascendancy in his court, courage, justice, and the conviction of his party,"—such a man may now and then disturb conventional circles in Washington, whether legal or political.

While intensely American in the best sense, Chief Justice Holmes is a cosmopolite in his reading, in personal acquaintance, in his sympathies, and in his ideals as a jurist. For his own as well as for his father's sake, he has been taken into European circles which few American jurists have penetrated. He knows Continental literatures. He is alive to Italian pioneer investigation in jurisprudence based on science.

Socially he will adorn the cosmopolitan society of the national capital. And in the sacred confines of the court room, whether when under public scrutiny or when the justices are "by themselves," he will not be found lacking in that father-wit which so often goes along with the judicial temperament. Of the five requisites of success in the calling to which he has given so much of his life, as defined by the late Justice Joseph P. Bradley of the United States Supreme Court,—moral sense, brains, learning, tact, and experience,—Chief Justice Holmes has at least four strongly marked. In addition, he has what Chief Justice Bradley said must be added to natural aptitude,—viz., "power of intense and persistent labor." That he is a Papinian, a Cujas, a Coke, a Hale, a Mansfield, a Blackstone, a Marshall,—in short, a genius such as arises now and then to put talent to shame and dazzle the legal profession, none of his most ardent admirers in Massachusetts will claim. Nor will those who question most the wholeness of his vision as judge fail to pay homage to the insight of his partial views, or the moral courage and lofty purposes of the man.





THE LATE DR. CHARLES KENDALL ADAMS.

DR. CHARLES KENDALL ADAMS, who died several weeks ago, was identified successively with three great American universities in important formative periods. He was the Nestor of modern advanced historical teaching in this country; and as head of the department of history and political science in the University of Michigan, his reputation was both national and international. Upon the retirement of Dr. Andrew D. White from the presidency of Cornell University, Dr. Adams was made the head of that institution, where he showed broad capacity for university administration during his seven

years' incumbency. Upon giving up that position he became the president of the University of Wisconsin, about ten years ago. Under his administration the institution at Madison has become one of the foremost universities of the world. The part that Dr. Adams took in the advancement of historical research in this country, and his share in the making of three universities, will have given his name an abiding place in the record of our intellectual progress. By the terms of his will, his estate will ultimately go to the University of Wisconsin for the endowment of fifteen fellowships.

THE LATE RABBI JOSEPH, HEBREW PATRIARCH OF NEW YORK.

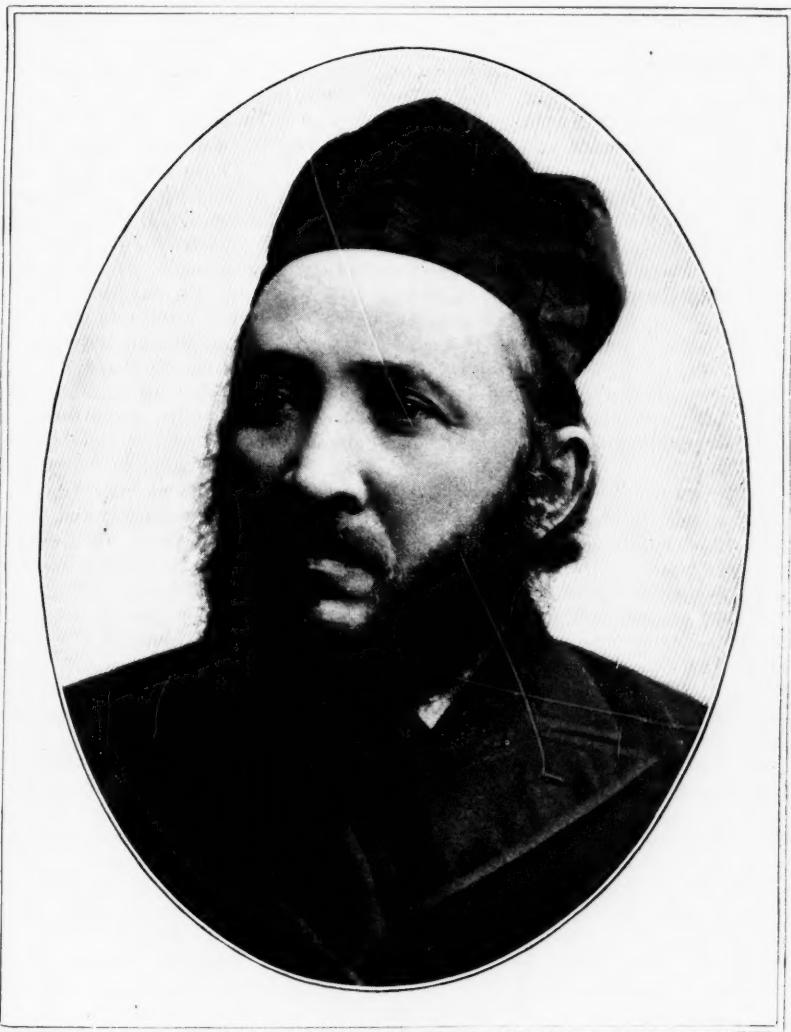
BY ABRAHAM CAHAN.

THE death of Chief Rabbi Jacob Joseph was the culmination of a long period of illness which had completely incapacitated him for public life. For several years he had been confined to bed with paralysis, so that the designation of chief rabbi had come to represent an idea rather than the occupant of the lofty rabbinical office which was created with the arrival of the celebrated Talmudist in this country.

When the sad news was told by the six Yiddish dailies published in New York's "East Side," the largest Ghetto in the world awoke to the fact that it had once had a *rav-hakolel* (chief rabbi) who was easily the greatest Talmudic scholar America had ever seen, and that that *rav-hakolel* was no more. His portraits, which had not been seen in the streets for six or seven years, had suddenly made their appearance in every store-window,—heavily draped in mourning.

A sigh of sorrow and of something akin to remorse went up from the Ghetto.

The orthodox old people were blaming the high pressure of life in their adopted country for having led them to become reconciled to their rabbi's untimely retirement from activity, as though



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THE LATE CHIEF RABBI JACOB JOSEPH, OF NEW YORK.

anxious to make up for it by feeling in one day all the anguish that should have been experienced during the six years of his physical helplessness. As to the younger sons and daughters of Israel, who had fallen in with the spirit of their time and their new surroundings, they were aroused to a keen sense of the tragedy of the rabbi's

life and death amid an unwonted environment.

"He was too good for America?" exclaimed men with gray side-locks and women in heavy wigs.

"Poor learned man! He was out of his element in a modern town like this," said those who had tasted "Gentile wisdom."

And both generations lamented him as a martyr, as the victim of changed conditions.

On the morning of the funeral hundreds of stores were closed in honor of the deceased "son of Law." Thousands of poor mechanics, laborers, peddlers, and pushcartmen forewent a day's earnings to swell the hosts of mourners. Every street on the lower East Side was streaming with people, hurrying and scurrying in the direction of Henry Street and Montgomery, where lay the remains of the great scholar.

"I hope it isn't yet too late to get near the rabbi's house," they whispered to each other, with solemn mien.

"I hope it isn't. To think that the chief rabbi—the memory of the righteous for a blessing!—is no more! I can hardly bring myself to believe it."

"We were not worthy of such a man of learning and piety. It's for our sins in this strange land that we have been punished. May he plead for poor Israel before the court of Heaven."

By 10 o'clock the pavements, sidewalks, stoops, fire escapes, and open windows were literally jammed with people. At a distance it almost looked as though not the streets below, but also the walls of the towering tenement houses were covered with men, women, and children. Newsboys were singing the names of the Yiddish papers as they pushed and jostled their way through the throng. Here and there a venerable-looking man, with dangling ear-locks and dragging beard, was telling the people around him of the erudition and acumen for which Rabbi Joseph had acquired fame throughout Lithuania, and how scarce men of his type were becoming in Israel; whereupon the old women nodded their bewigged heads and sighed, while the men asked questions and drew comparisons.

The body was washed and clad in death-clothes, a shroud, and a praying shawl. Then it was placed in a plain wooden coffin.

When the procession was started the three hundred boys from the religious schools of Manhattan and Brooklyn, who preceded the hearse, burst into song. They were chanting selections from psalms, and as their lugubrious soprano voices rang out, accompanied by the doleful jingle of charity boxes, many a woman broke into sobs.

The funeral proceeded to six of the largest

synagogues on the East Side, in each of which brief services were held while the hearse waited in front of the house of God. There were fully 50,000 mourners in the crowd which followed the coffin as far as the ferry,—the largest Jewish procession of its kind ever held on American soil.

Rabbi Jacob Joseph was born in 1840, of a family of poor old-fashioned Jews,—in the town of Kraus, province of Kovno. He was surrounded by a world in which the Gentile population was in the firm grip of mediævalism, and in which Talmudic lore was the only source of intellectual life known to Israel.

There are no places of amusement in a Ghetto of this kind. Playhouses are proscribed by the Talmud. Balls or dancing schools, like those which teem on the east side of New York, are unimaginable. If there is a public garden in Tavrig, you may find it crowded with Jews of a Saturday afternoon; but if it ever was at the time Rabbi Joseph was a boy there, the sexes were kept carefully apart. The very notion of a man and his wife taking a walk together, like a Gentile couple, would have shocked the sense of decency of every God-fearing Jew in the place. The synagogue, ringing with the voices of scholars, was at once the clubhouse and the university, the theater and the house of prayer. "A brainy piece of Talmud is far more delicious than a fat piece of meat," say the pious old people of Tavrig.

At the period in question boys of the class to which belonged the future chief rabbi of New York never studied any of the "Gentile subjects" taught in the government schools. Their whole time was occupied by the *cheder*, where they spent from ten to twelve hours a day learning the Old Testament under the instruction of a bewhiskered man called *melamed*. Learning to read and to write Russian or German,—any language, in fact, except Yiddish Hebrew and the mixed Chaldaic and Hebrew of the Talmud—would have been looked upon as something in the nature of a sin, as well as an unpardonable waste of time.

Already while at *cheder* Jacob attracted considerable attention by his unusual reasoning powers and memory. At the age of sixteen he entered the celebrated Talmudic academy at Walojin, in the province of Wilna. Here he was at once singled out as the most promising student in the place, as a future "great one in Israel." It was here that he was surnamed Yankel Harif, or Jacob the keen-witted.

He married in a suburb of Kovno, and, according to the custom of those days, he left his bride soon after the wedding to pass a year or two in holy study, away from the effeminating

influences of home. This was the only kind of wedding tour known to the world in which he had grown up, and the young scholar spent this time studying the Talmud under the guidance of Rabbi Israel, of Salant, perhaps the ablest Talmudist of his time.

Armed with a diploma from the famous scholar, Jacob, shortly after rejoining his wife, accepted a rabbinical position, at first at Valon, and then at a larger town. His fame as a "keen head" spread far and wide, so that by the time he was a man of forty or more he was invited to become the "town-preacher" of Wilna, known as the Jerusalem of the Lithuania and the great center of Talmudic scholarship in the world.

Meanwhile the overflowing immigration of Russian Jews to America, ushered in by the anti-Semitic riots of 1880, had built up on the east side of New York at once the largest and most prosperous Ghetto of modern times. Ambitious to outstrip the people at home, the refugees imported many of the celebrities of the old Ghettos of Russia, Poland, Galicia, and Roumania. They did not rest until they had secured the best synagogue singers, the leading wedding band, and every Yiddish actor known to fame.

When it was decided to invite a celebrated Talmudist to become the religious head of the East Side, the choice of the eighteen synagogues which had formed a joint organization for the purpose naturally fell upon the town-preacher of Wilna.

Rabbi Jacob Joseph arrived in New York on July 7, 1888. His advent was hailed as the opening of a new era in the history of American Judaism, as the beginning of a great religious revival not only on the east side of New York, but in the Jewish colony of every city in the United States. There is no hierarchy in the Church of Moses, yet the newly arrived Talmudist was proclaimed chief rabbi, the older orthodox rabbis of New York being expected to recognize his authority of their own accord and out of respect for his superior erudition.

His first sermons on American soil attracted the largest crowds ever seen on similar occasions on the East Side, but while these sermons fully bore out his reputation for learning and acumen, the more far-sighted of his friends came away heavy-hearted.

There were plenty of immigrants from Wilna among those who came to hear him, and somehow the same people who had admired his exhortations at home met them rather lukewarmly in New York.

Rabbi Joseph was the same, but his listeners had changed.

During the three or four years which they had

spent under American influences they had lived more than they had in all the forty or fifty years of their life at home; and although many of them still clung to the essentials of their faith, they had learned to wear short coats and to dispense with their side-locks, or even to shave their beards. They had fallen into the way of going to theaters and reading newspapers; they had attended public evening schools, and picked up a thousand and one of the little things which go to make up modern civilization, and without which life now did not seem to them worth living.

Rabbi Joseph remained the man of the third century he had been brought up to be, while his fellow country people, whom he came here to lead, were in hourly contact with the culture of the nineteenth century. A gap was yawning between the chief rabbi and his people, one which symbolized a most interesting chapter in the history of Israel, but which foreshadowed the tragedy of the newcomer's life in this country.

People who came in contact with him were fascinated by his magnetic personality. He was a plain-spoken, mild-tempered, unsophisticated, modest man. His heart went out to Lithuania. There are college-bred people in Wilna, too, but there the old-fashioned members of the community still hold sway, while here the modern spirit has taken possession of every nook and cranny of the Ghetto. One cannot wear a long-skirted coat without being scoffed at as a "green-horn." The very Yiddish of the people on the East Side is full of English words and phrases to which the imported preacher was a stranger.

The worshippers who attended his sermons found them "green,"—a term applied in the New York Ghetto to everything that is not up to the American standard as interpreted by the East Side. They looked down upon his ways as they do upon the man who has not replaced his Russian cap by a Grand Street hat. The celebrated Talmudist strained every effort to adapt himself to his new environment. He took pains to say "street" instead of *gass*, and "room" instead of *zimmer*; he strove to intersperse his good Lithuanian Yiddish with broken bits of English phraseology, as he saw his followers do; but all this, so far from tending to bridge over the gulf between him and his flock, only seemed to accentuate the unnaturalness of his position. His audiences were gradually thinning out. His sermons became few and far between.

He was the same Jacob the keen-witted as of yore, but the people to whom he addressed himself had heard scores of effective speakers in Yiddish and in English.

The older rabbis of the Ghetto were not slow

to appreciate the situation. Not only did they refuse to recognize his superiority, but they even added the title of "chief rabbi" to their names. Thus the East Side found itself in possession of as many chief rabbis as it had orthodox religious teachers.

One of the innovations introduced in the name of Rabbi Joseph was a system of supervising the "kosher" slaying of cattle. In order to insure that the meat bought by the faithful was prepared in accordance with the laws of Moses and the Talmud, a force of inspecting rabbis and *shochtim* (slayers) was appointed. These acted under the supervision of the chief rabbi, and the patrons of those wholesale butchers who submitted to this system received certificates declaring their meat "kosher."

This gave rise to a conflict of interests in the meat business. The Ghetto was torn into factions, the butchers of each faction displaying the certificate of a different "chief rabbi" in his window.

The enemies of the new system charged Rabbi Joseph with trying to force upon the poor people a *corobka* (meat task) like the one imposed upon the Jews in Russia. As a matter of fact, however, he had very little to do with the practical side of the measure. He was neither a man of affairs nor a fighter. He remained absorbed in the intricacies of his Talmud; remained absorbed in the third century, in which he had dwelt all his life. His great desire was to be

allowed to read his holy books undisturbed. But the meat certificate which bore his name proved to have a far greater fascination for the pious housewife of the Ghetto than those of his rivals, and the struggle became more bitter every day. People accused the organization which paid him his salary of acting in league with a butcher trust, and the rabbi himself with serving the rich against the poor. To cap the climax, he delivered several sermons against trade unionism. In one of these, which was delivered upon the death of three Jewish children by fire, he explained the disaster as a manifestation of divine wrath called forth by the large numbers of Jewish workmen belonging to labor organizations.

This was the saddest period of his life. Having spent all his former days in the peaceful study of his favorite subject, and amid the cordial reverence of devout men and women, he was now drawn into discussion of practical issues with which he had neither patience nor familiarity.

Chief Rabbi Joseph was the epitome of a world which was and still is, but is doomed not to be. The Talmud, which he knew so well, is the soul of a people; but another soul, the Modern Spirit, is crowding it out of the bosom of life on to the dust-covered shelves of history. In the Ghettos of America this process goes on much more rapidly than it does in Rabbi Joseph's birthplace. The celebrated Talmudist died here like a flower transplanted to uncongenial soil.



THE FUNERAL OF CHIEF RABBI JOSEPH IN THE STREETS OF THE "EAST SIDE," NEW YORK CITY.

THE RUSSIAN JEW IN AMERICA.

BY MAURICE FISHBERG, M.D.

THE history of the Jews in America begins with the discovery of the continent by Columbus. It has been established beyond question that at least five Jews were with him on his first voyage. Among the first settlers in South America and Mexico, at the end of the fifteenth century, were many Jews, mostly refugees from Spain and Portugal. Some of these again emigrated to the colonies in North America. Many other Jews came directly from Holland, Spain, and Portugal. There are records showing that there were German and Portuguese Jews in New Amsterdam as early as 1650. At the time of the Revolution the number of Jews in the colonies was comparatively small; in 1818, Mordecai M. Noah estimated their number at 3,000, and Isaac C. Harby put it at 6,000 in 1826. The American Almanac of 1840 speaks of 15,000. The number of Jews in the United States did not materially increase up to 1880, when a committee appointed by the Board of Delegates of the American Israelites estimated them at 230,257. The Russian Jewish immigration began at that time, and in 1888 Isaac Markens estimated the American Jewry at 400,000, nearly double that of eight years before. The American Jewish Year Book for 1901-02 shows that in 1900 there were 1,058,133 Jews in America. The largest number, 400,000, is credited to New York; Pennsylvania, with 95,000; Illinois, with 75,000; Idaho and Nevada appear as having the least,—300 Jews each. This estimate is far too low. According to a statistical investigation by Mr. Joseph Jacobs, based on the number of dead interred in Jewish cemeteries, it has lately been calculated that there are at the present time 584,788 Jews in Greater New York, which is 184,788 more than that of the American Jewish Year Book. The same is probably true of Pennsylvania, Illinois, etc. I think that 1,500,000 is nearer the truth. This means that there are more Jews in the United States than in any other country, excepting Russia and Austria-Hungary. Greater New York, with its 584,788 Jews, has more than Prussia (379,716), France (80,000), and Italy (50,000) combined. When the first Russian-American Congregation was organized in New York, on June 4, 1852, it had less than two dozen members. But since 1882 the number of Russian Jews has been rapidly increasing, and at present their number in Greater New York is estimated at 367,690.

After Alexander II. was assassinated on March 14, 1881, repeated anti-Jewish riots broke out in various parts of Russia. Thousands of Jewish homes were destroyed, and many Jews who were rich, or at least in easy circumstances, suddenly found themselves reduced to poverty. The police and the military authorities did not, in the majority of these riots, make any serious attempts to help the Jews, and in many instances it is known they even assisted in the pillaging of Jewish property. The cause of these riots is known to have been purely political. The constant discontent of the Russian peasants, due to incessant oppression by the Russian authorities and unbearable taxation, endangered the stability of the new government under Alexander III. The government and the inspired press used the Jew as a means of distracting the minds of the common people from their discontent and revolutionary tendency. They pointed out that many of the younger Jews participated in the revolutionary movement of the Nihilists, and that the Jews were consequently responsible for the death of the "Czar-Emancipator."

The distressing condition of the Jews became absolutely intolerable on May 15, 1885, when the so-called "*May Laws*" were enacted in Russia. These consist essentially of the establishment of the "Pale of Settlement" of fifteen governments (districts) in Poland, Ukraine, Lithuania,— "All stolen by Russia from other people" (Harold Frederic),—in which the Jews may live, and prohibiting them from living in the interior of Russia. In the "Pale" the Jews may live only in towns and cities, and not in the villages. All the leases and mortgages held by the Jews on landed estates were canceled by this act. These laws, in addition to older laws exacting from Jews special taxation on property, rents, legacies, breweries, vinegar factories, printing presses, etc., made it practically impossible for the bulk of the Jews to sustain themselves. Even meat killed "kosher" is taxed in Russia, so that a Jew has to pay for a pound of meat nearly double the price for that which is not "kosher." Jewish children are admitted to the high schools and universities to the extent of only 5 per cent. of the population; and, as there are cities in the "Pale" in which the population consists of more than 50 per cent. of Jews, the benches of the high schools are vacant, while hundreds of the Jewish youth are vainly applying for admission. The re-

sult of these restrictions can be easily imagined. The first relief came by emigration. Baron de Hirsch rendered some assistance. He aided many to emigrate to Argentine and to Canada. But the United States, with its great opportunities, attracted most of them, and up to date over 600,000 Russian-Jewish immigrants have settled here. Freedom from oppression was the chief attraction to this country. Then the great opportunities offered in the United States to the Jews,—whose enterprising spirit, tenacity of purpose, and inexhaustible energy are well known,—were other attractions. Here he may engage in any business, trade, follow any vocation, and as long as he does not violate the laws of the country he is not interfered with. The schools and universities are open to him,—a fact which attracted many. I personally know a goodly number who have emigrated to the United States for the last reason alone. All these, and many other minor causes, have been operative in the Jewish immigration to America, and it is predicted that if conditions in Russia keep up in the manner they have for the last twenty years, at least one-half of the Jews in Russia will emigrate to the United States within the next quarter of a century.

OCCUPATION OF THE JEWS IN RUSSIA.

It has been stated by people who have never been in Russia that the Jews never engage in any occupation requiring manual labor; that they are nearly all merchants, small traders, agents, and solicitors. How false this is can be seen from the statistics gathered by Mr. Joseph Jacobs, showing that 12 per cent. of the entire population of the "Pale" are artisans (Jewish Encyclopedia, Vol. II., pp. 115-116), which is a higher proportion than in the general communities of either France or Prussia. They work as tailors, shoemakers, furriers, bookbinders, house painters, opticians, diamond setters, glovers, tanners, watchmakers, etc. In fact, I have observed that in many cities in the Pale no work can be done on Saturdays because the Jewish artisans observe the Sabbath; and it is agreed by all who are acquainted with the conditions, that should the Jews leave in a body it would cause an industrial and commercial disaster in Russia from which it would take years to recover. In the "Pale," particularly, there would be no skilled artisans to replace them. It is also agreed by all that as skilled artisans they are of the best. In fact, the Russians give them preference on account of their skill, steadiness, and sobriety, the two latter qualities being uncommon among the Russian workmen to the same extent. Besides all these, the Jews are

represented in the learned professions to a greater extent than the Russians. There is a considerable number engaged in the practice of medicine, law, architecture, engineering, journalism, and the like. A great number have also achieved international fame as musicians, painters, sculptors, writers, poets, and scientists.

THE JEW PHYSICALLY.

The two most important characteristics of the Russian Jew are their short stature and their contracted, flat chest. Their average height is about five feet four inches, equaling in this regard the average American youth, who has yet two to three inches to grow. I have observed, by measuring 3,000 Jews of all ages in New York, that this short stature improves greatly under the favorable environment of the United States. I find that the Jews born here are about one inch taller than their Russian parents. The same can be stated about their characteristic narrow chests. Those Jews born in the United States are decidedly of superior development. The characteristic "Jewish" attitude of the body and the peculiar facial expression, coupled with that long, narrow, prominent, and hooked nose, so much exploited by the caricaturists, is a myth in the case of the Russian Jews. Any one passing through the streets of the East Side will soon be convinced of this fact. We find here not one, but at least a dozen Jewish "types,"—Jews with long faces and Jews with broad faces, the latter reminding one of the Mongolians; long, broad, curved, hooked, prominent, and flat noses. While the majority of the Jews have dark hair and eyes, still we find a large proportion of blondes, with light or red hair, and blue or gray eyes. All these physical traits are of importance from the anthropological standpoint, throwing some doubt on the supposed purity of the Jewish race.

To dispel an erroneous inference, we must emphasize that the stunted appearance of the Jew by no means incapacitates him from meeting the usual contingencies of every-day life. As has been shown by Herbert Spencer, tall and muscular men, who can lift great weights, jump great heights, or run great distances, are not usually the ones who are fitted to withstand the strain of modern life, or do hard work under unfavorable conditions. In the case of the Jew, we may observe the energy he lacks in his muscles is chiefly concentrated in his nervous system, thus adapting him to withstand the hazards of modern civilization, when brute force is of rather secondary importance.

Arriving at New York, the Russian Jew finds himself handicapped to a greater extent than immigrants of other nationalities. Besides the lack of the English language, he also finds all the con-

ditions different from those under which he was reared in his native country. It must be recalled that the industrial development of Russia, particularly the fifteen governments of the "Pale," is at least fifty years behind that of the United States. Any trade that he may have spent years in acquiring he must learn over again, according to American methods. The only useful qualification a Russian immigrant brings over with him to the United States is his adaptability. This he has acquired during constant migrations for the last two thousand years, bringing him in contact with all peoples and their civilizations, and rendering his organism pliable. This power of easy adaptation to a new environment is peculiar to the Jews to such an extent that scientists are inclined to consider them a cosmopolitan people, who can live and prosper in all continents, in all climates, and under any environment. Another characteristic of the Jewish immigrant is his readiness to absorb and assimilate new ideas, new sentiments, new conceptions of life, and in the course of one or two generations the descendants of that uncouth Russian Polish Jew appropriate American modes of life and activity, and are no more to be distinguished from the surrounding population. It is all due to his ready response to new environment and new spirit of the time.

SOCIAL AND INDUSTRIAL LIFE IN NEW YORK.

Looking at the conditions in the lower East Side of New York City, we can observe clearly the metamorphosis the Russian Jew has undergone in the course of a few years' residence here. It is rare to find a Jewish child below thirteen years of age who does not attend public school. After graduation from the grammar school, many avail themselves of the education offered in the City College, high schools, and normal colleges, as well as the universities. Over 60 per cent. of the students of the City College and the Normal College are known to be children of the Ghetto. The professions are being crowded with "East Siders." The Eastern Medical Society has a membership of four hundred physicians and more than 50 per cent. of these entered the profession within the past ten years. There are in New York, I am informed, at least fifteen hundred lawyers of Jewish faith, more than one-half of whom were admitted to the bar within the last ten years. Most of the city departments have East Side Jews employed in various capacities. On Broadway and the surrounding streets one observes the immense number of Jews engaged in the various business pursuits,—the Cohens, the Levys, Goldsteins, Goldbergs, Silversteins, etc., are in the majority. In fact, the

tailoring and the allied trades largely are in Jewish hands. A great proportion of these Broadway merchants and manufacturers are Russians, who have been less than twenty years in the United States. The Russian Jew who, living on the East Side, meets with prosperity, moves uptown, as a rule. He thus does what the Americans, Irish, and Germans have done.

The opinion entertained by many that the Russian Jews are mostly engaged in tailoring and peddling is erroneous. While it is true that most of the clothing worn by the people of America has been produced by Jews, still it is a fact that not more than 20 per cent. of Russian-Jewish artisans are engaged in tailoring. Another important point is that the Jews in America have revolutionized the tailoring trade by practically destroying the market for second-hand clothing. For the same price, and even less than had to be paid for second-hand clothing ten years ago, one may procure new clothing. The value of this from the hygienic standpoint cannot be overestimated.

There are very few factories in which one may not find a certain proportion of Jews employed. As furriers, jewelers, diamond setters, watch-makers, house painters, carpenters, tanners, and cigar makers they are known to be skilled. The women work at neckwear, millinery, artificial flowers, and cigar and cigarette making and the easier forms of tailoring. Many are engaged as sales ladies in the department stores; as clerks, bookkeepers, and typewriters in the office buildings down town. The public schools in the Ghetto district of New York are mainly taught by Jewish women.

Socially, also, the Russian Jew has peculiarities. The older generation does not know anything about modern social organization of clubs, neither do they spend their leisure hours in saloons or other questionable resorts. But they invariably enroll their names on the list of one or more benevolent societies, secret orders, and congregations. This is new with him. In Russia there are no benevolent organizations. The strict laws of the bureaucratic government prohibit any form of organization. Here it is the greatest pride of a Jew to become an officer of a benevolent society, and his wife and children share the pride.

The majority of the Jewish laborers who have been in this country for some time are members of the labor unions of their trade. Some trades in the East Side are organized to an extent equal to that of American or British skilled laborers.

The younger generation have their social clubs, of which there are a good number on the East Side. To their credit it must be said that these clubs have no bars where spirituous liquors are sold. They prefer to drink soda water. When-

ever these clubs or societies arrange for a ball or picnic, they are charged double rates for the use of the hall or picnic grounds; the excuse given by the proprietor is that he will sell very little liquor to Russian Jews, the proceeds of such sales being his chief source of income.

The East Side maintains three Jewish theaters and several music halls. In the former one can often see some excellent productions, well staged and acted by talented artists. The latter are, on an average, below the standard which might be desired. The theaters also are practically an American development, because for the past fifteen years the Russian government has prohibited Jewish theaters.

There are six daily papers published in the East Side, with a combined circulation of over 100,000 daily. The habit of reading a daily paper has also been acquired in America. The Russian Government does not permit the publication of a Yiddish newspaper, though there are a few Hebrew papers, whose circulation, however, is limited. Here nearly every Jew reads his daily paper, and as almost all the Russian Jews can read Yiddish, there is a good reason for the existence of the six dailies. The public libraries in New York City are patronized by the Russian Jews proportionately more than by others. This fact will be attested to by all the librarians in the city. It is remarkable how infrequently they apply for modern popular fiction. The Aguilar Free Library in the Jewish section circulates more of the works of Spencer, Darwin, Huxley and similar writers and philosophers than any other library in New York.

It has been charged that the Russian Jew is not amenable to sanitary and hygienic teachings. The Beth Israel Hospital, founded and maintained in the most excellent condition by Russian Jews in New York City, is good proof to the contrary. It can be stated positively that nearly every Jewish man, woman, or child is vaccinated. There were, therefore, less than ten cases of smallpox among Russian Jews during the recent epidemic, although the disease was raging uptown. In case of contagious disease, when the Health Department placards a house, no neighbor will enter it for fear of contagion. The United Hebrew Charities has lately inaugurated a systematic campaign against tuberculosis in the East Side. Miss Gertrude Friedlander, who was assigned by this organization to instruct the relatives of the consumptives of the dangers of contagion, has achieved remarkable results. Most of the consumptives referred to me for examination are anxious to learn how to save those dear to them from becoming infected with the dread disease. This shows that

the Jew is receptive when approached by a competent person. This he also learned in the United States. In Russia, very few Jews know about the dangers of contagion, and the hospitals are in the most pitiful state from the hygienic standpoint.

POLITICAL ACTIVITY OF THE JEWS.

Many of the younger people have their names enrolled in the political organizations. It cannot be stated that any political party is given preference. There are probably as many Russian-Jew Republicans as Democrats. It may be stated, though, that the majority of the business men vote the Republican ticket in federal elections and the Democratic in municipal elections. That the Russian-Jewish vote cannot be bought was demonstrated at the last municipal election in New York City. The Jewish districts went solidly for the Reform ticket, although in previous elections Tammany Hall almost invariably carried these districts.

Some are adherents of the various socialistic political organizations in the East Side, but the Socialists are constantly losing ground here. After living for some time in the United States the Russian Jew learns to appreciate our form of government, which he, for obvious reasons, enjoys more than any one else. And during our late war with Spain, proportionally a greater number of Russian Jews enrolled in the volunteer army than of the other immigrant population in the United States. The regular army also has a good number of Russian Jews in its ranks. Their bravery, energy, and power of endurance has frequently been praised by officers of the army.

We thus see that the Russian Jew is adapting himself to American life. Physically he improves his stature, chest development, and muscular system under the favorable environment of the United States. He prospers in business to a greater extent than most other immigrants; he supplies a large contingent of people engaged in intellectual and professional pursuits as physicians, lawyers, teachers, architects, journalists, and the like. He adopts American habits, as club life, reads newspapers, organizes labor unions and patronizes the public libraries extensively. When called upon, he fights for the country which has given him freedom. All this, added to his steadiness, sobriety, and industrious habits, tends to show that the Jew of the future will be a good American citizen. The observation that the first generation of immigrant population tend to degeneration, for various reasons, does not hold good with the Russian Jew. Their descendants are positively improving physically, morally, and intellectually under the favorable influence of American conditions.

THE CENSUS OF MANUFACTURES.

BY S. N. D. NORTH.

(Chief Statistician.)

THE twelfth census of manufactures was a gigantic statistical work, more difficult and complicated than any similar inquiry ever undertaken. It has been completed within two years from the date upon which the fieldwork began. This is in accordance with the mandate of Congress, which fixed a two-year time limit in the census act. It is less than one-half the time consumed in the compilation of similar statistics of previous censuses. Congress was impressed with the idea that industrial statistics, to be of practical and contemporaneous value, should be available within a reasonable time from the period to which they relate. The manufacturing statistics of the census of 1860, taken just before the Civil War, were not published until after that war had closed. The data had been knocked somewhat awry by intervening events. The world moves so fast, the statistical data supplied from commercial sources is so complete and so prompt, that census figures of industry have heretofore possessed some points in common with last year's birds' nests. A great advance in celerity of publication has now been achieved; and those who have watched and pushed the work are convinced that under the favorable conditions created by the establishment of a permanent census office, it ought to be possible, at the thirteenth census of 1910, to gather, compile, and publish the statistics within one year. Nothing is impossible when there is money enough to do the work and skillful and experienced clerks to handle it. It has taken Congress a long time to discover that a permanent census office will prove a great money saver, while incidentally adding materially to the accuracy and the value of the census statistics.

COST OF OUR INDUSTRIAL INVENTORY.

It has cost \$1,200,000, in round numbers, to take and collate the statistics of manufactures for 1900. It is a goodly sum of money; but it is worth what it cost to find out in definite and tangible figures just where the United States stood, industrially, in the last year of the nineteenth century. It is the national stock-taking,—and it is interesting to note that the United States was not only the first nation to take an industrial census, but remains the only one to take such a census in a manner at all comprehen-

sive and satisfactory. Our census of manufactures is due to Albert Gallatin, who, when he was Secretary of the Treasury in 1810, suggested to Congress that \$30,000 out of the \$150,000 appropriated for the third census be set aside for this purpose. The modest sum proved sufficient, and the difference between this \$30,000 and the \$1,200,000 expended for the manufacturing census of 1900 is a good measure of the industrial growth which has intervened.

A CENTURY'S MARVELOUS RECORD.

The balance sheet, as we strike it from the census figures, tells a story of progress and prosperity so impressive as to be almost startling. The average American is no doubt too much addicted to bumptiousness when he talks or writes about our achievements as a people. But he has his census to justify his statements, for the statistics show that, however much he may seem to be given to exaggeration, he does not in fact exaggerate when he measures our progress by that of other nations.

It is difficult to reduce the great mass of census figures to simple concrete terms that tell the whole story at a glance; but the brief table on the next page compresses a good deal of the industrial history of our country for the last fifty years into small compass. It embodies what may be called a bird's-eye view of the progress of manufactures during the half century.

The manufacturing statistics of the censuses prior to 1850 were too imperfect and fragmentary to make it proper to accept them as a measure of industrial growth in the first half of the century. But Tench Coxe, analyzing the manufacturing statistics of the census of 1810, and reading into them 25 per cent. of products beyond what was actually returned, ventured to estimate the total value at something less than \$200,000,000, including in that total the products of the household industries, which then embraced a great preponderance of the articles now manufactured under the factory system. Contrasted with that figure, we now have a gross total of \$13,014,287,498, or an increase of more than sixtyfold. There is nothing in history which approaches or approximates this increase. It must remain for all time to come the unique and phenomenal chapter in the world's economic development.

COMPARATIVE SUMMARY, 1850 TO 1900, WITH INCREASE PER CENT. FOR EACH DECADE.

	Date of census.					Increase per cent.				
	1900	1890	1880	1870	1860	1850	1890 to 1900	1880 to 1890	1870 to 1880	1850 to 1860
Number of establishments.....	512,339	355,415	253,852	252,148	140,433	123,025	44.2	40.0	0.7	14.1
Capital.....	\$9,835,086,969	\$6,525,156,486	\$2,730,272,046	\$2,118,208,769	\$1,000,855,715	\$533,245,351	50.7	133.9	31.7	79.6
Salaries, officials, clerks, etc., number.....	387,174	461,009	2,732,595	2,033,086	1,311,246	957,039	25.1	55.6	33.0	56.6
Wage earners, average number.....	\$404,230,374	\$391,988,208	\$947,853,795	\$75,384,343	\$78,878,966	\$238,755,464	23.1	99.5	22.2	104.7
Total wages.....	5,316,802	4,351,613	2,019,035	1,615,598	1,040,349	731,137	23.7	64.8	25.0	55.3
Men, 16 years and over.....	\$2,328,681,254	\$1,891,228,321	2,019,035	1,615,598	1,040,349	731,137	21.8	51.2	64.2	19.5
Women, 16 years and over.....	4,116,610	3,327,032	531,639	323,770	270,897	225,022	30.8	43.6	38.7	37.0
Wages.....	\$2,021,347,568	\$1,656,574,483	\$215,327,951	\$215,327,951	181,921	114,628	29.5	52.0	36.5	85.8
Women, 16 years and over.....	\$281,168,034	\$215,327,951	\$215,327,951	\$215,327,951	181,921	114,628	42.3	74.5	26.9	124.4
Children under 16 years.....	\$25,661,692	\$16,625,862	\$3,396,823,549	\$2,488,427,242	\$1,031,605,092	\$535,123,822	38.9	52.0	36.5	85.8
Wages.....	\$25,661,692	\$16,625,862	\$3,396,823,549	\$2,488,427,242	\$1,031,605,092	\$535,123,822	38.9	52.0	36.5	85.8
Miscellaneous expenses.....	\$1,628,035,611	\$931,225,035	\$3,396,823,549	\$2,488,427,242	\$1,031,605,092	\$535,123,822	38.9	52.0	36.5	85.8
Cost of materials used.....	\$7,348,144,755	\$5,102,044,076	\$3,396,823,549	\$2,488,427,242	\$1,031,605,092	\$535,123,822	38.9	52.0	36.5	85.8
Value of products, including custom work and repairing.....	\$13,014,287,498	\$9,372,437,268	\$5,390,573,191	\$4,252,325,442	\$1,885,861,676	\$1,019,106,616	38.9	52.0	36.5	85.8

* Not reported separately. + Decrease. # Not reported.

Measuring progress by long periods of time, it suggests that it has been possible, in one century, in one nation, statistically to record an advance nothing at all equivalent to which occurred in any one thousand years in any other country, at any preceding epoch. It appears to be a satisfactory answer to the contention that the condition of the masses does not improve with the advance of civilization. For, however true it may be that a large part of the increment has gone to comparatively few, the figures represent not merely an increase of wealth, but a distribution and diffusion of wealth such as the world has not known before or elsewhere.

GROWTH OF MANUFACTURES SINCE 1850.

Leaving figures more or less apocryphal, we may profitably confine ourselves to those from the census of 1850. In comparison with that census there has been an increase in capital invested in manufactures approximating seventeenfold; in the average number of wage earners, about four and one-half fold; in amount of wages paid about ninefold, and in value of products about twelvefold. The population of the country has in the meanwhile increased two and one-quarter fold, and the value of agricultural products something less than twofold. While these comparisons must be made with many reservations, they nevertheless afford an approximate exhibit of the enormous increase in manufactures which occurred in the United States in the last half of the nineteenth century. They are particularly suggestive as an indication of the increasing productive capacity of labor, due chiefly to the increased effectiveness of machinery and the largely increased investment of capital. The apparent value of products per wage earner has increased from \$1,065 in 1850 to \$2,448 in 1900. Another way of putting it may be illustrated by the textile industries, in which it appears that all the cloth necessary to clothe 76,000,000 people was made by 640,548 persons, or much less than one person in a hundred. Machinery involves a constantly increasing investment of capital, to make possible this increased efficiency of labor; and the increased horse power employed in manufacturing is, on the whole, the most striking fact brought out by the twelfth census. The total horse power so employed was reported in 1890 as 5,954,655; in 1900 as 11,300,081, an increase of 89.8 per cent. in ten years,—altogether the largest increase shown at any point in the statistics. It is commonly calculated that one-horse power, whether water, steam, electric, or what not, is equivalent to the labor of ten men,—a very low average, since it makes no allowance for the fact that the engine never tires and never

varies. It means that the horse power employed in our manufactures in 1900 was equal in its producing capacity to the labor of 113,000,000 able-bodied men, working every day in the year. How insignificant in contrast appears the contribution to industrial wealth of the 5,316,802 men, women, and children,—the actual average number of persons employed in the census year to direct and supplement this tremendous power. It needs figures of this definite magnitude to enable us to understand how rapidly power-driven machinery is increasing its relative ascendancy over hand labor in American manufacturing, and how enormously the power of man has increased to develop the wealth which nature holds in store.

ADVANCE OF ELECTRIC POWER IN A DECADE.

One interesting phase of these statistics of power should be noted in passing. The electric motor is just beginning to make itself felt in manufacturing. The number of such motors in use in 1890 was not reported; but they were credited with 15,569 horse power. In 1900 the number of motors was 16,923, with a horse power of 311,000—only 2.7 per cent. of the total horse power employed, but an increase of nearly nineteenfold in ten years, and a prophecy of what is to come, and to come quickly. For already, since the census was taken, electric power has made giant strides in our manufacturing establishments, and everywhere it means an economy of power and an increase of efficiency. The census makes record of the results of the utilization of the water power at Niagara, at the Sault Ste. Marie, and at many other points, for the generation of electricity to drive the machinery of mills located at distant points. Thus it happens that the new motive power, instead of superseding water power, is bringing into use many such powers not advantageously situated for mills, but which can be utilized at great distances, in the centers of industry and transportation.

MACHINERY REPLACES HAND LABOR.

To the much more general use of power-driven machinery in this country may safely be attributed the remarkable advance of the United States to the first rank among the manufacturing nations. The late Michael G. Mulhall, the English statistician, states that (in 1896) "nearly all American manufactures are produced by machinery, while in Europe more than one-half is still handwork;" and this is his explanation of the fact he concedes, that the United States, although the last of the manufacturing nations to enter upon the factory system of production, and holding the fourth rank in production in 1860, being then

surpassed by Great Britain, France, and Germany, in the order named, has now jumped to the first place, Germany having also passed France in the interval.* If we can accept Mr. Mulhall's basis for estimating the value of the manufactures of the United Kingdom, they reached a total of \$5,400,000,000 in 1900, which was nearly \$3,000,000,000 less than the net value of the manufactured products of the United States as shown by the twelfth census.

"NET" AND "GROSS" VALUES AS DETERMINED BY THE CENSUS.

It should be here explained that the "net" value, as ascertained by the census, is the value that remains after deducting from the "gross" value of \$13,000,000,000, the value of all the partially manufactured products which became the materials of other establishments in an ascending series of industrial conversions, and were thus duplicated and sometimes reduplicated in the tabulation of the individual returns. The amount of the duplication and reduplication thus occurring was \$4,633,804,967, the cost of partially manufactured materials used, leaving a "net" value of \$8,370,595,176, which represents the original cost of raw materials, plus the value added by all manufacturing processes. Of this net value the raw materials represent 28.5 per cent., and the remainder practically represents the labor cost of manufacture, in one form or another.

The "gross" and "net" values of our manufactures, as reported by the census, have hitherto been the source of much misapprehension of the statistics, and have led to many charges that the census greatly exaggerates the volume of our manufactures. The criticism has some foundation, and the twelfth census has sought to avoid it. At the same time it remains the fact that gross value truly represents the volume of commercial transactions involved in manufacturing enterprise, in much the same way that the total transactions of the bank clearing house of a city represent the actual bank transactions of that city. Wholesale and retail trade in the products of manufactures represent another series of transactions, involving values much greater than the gross value of products; it consists of the distribution, selling, and reselling of these products as they pass directly, or through middlemen, into the possession of the ultimate consumers. The total volume of these transactions in the United States is unquestionably greater than that of the international trade of the principal countries of the world, which amounts to the sum of \$20,000,000,000 (exports and imports added to-

* "Industries and Wealth of Nations," by Michael G. Mulhall. 1896.

gether), and which likewise represents, very largely, the duplicated value of articles in various stages of manufacture sold twice or thrice.

AGRICULTURE GIVES WAY TO MANUFACTURES AS THE CHIEF SOURCE OF NATIONAL WEALTH.

Another interesting fact brought out by these statistics is the advance of manufactures to the first place among the sources of national wealth, exchanging places with agriculture, which has heretofore been the chief contributor to the annual national increment. Until the census of 1890, the supremacy of agriculture was not open to question. But somewhere in the decade preceding that census, manufactures passed agriculture, after making all possible allowance for deficiencies and duplications in the statistics. The census of 1890 placed the value of the products of agriculture at \$2,460,000,000; but it omitted the value of live stock on farms, of stock sold for slaughter, etc., and statisticians have accordingly increased the figure to \$3,289,000,000. The gross value of the products of manufactures were returned at the same census as \$9,372,000,000. By deducting the value of all materials consumed in 1890, whether raw or partially manufactured, there remained a residue of \$4,210,000,000, which may be called the value added to raw materials by the several processes of manufacture. It is a sum just about one billion dollars in excess of the highest estimate of the value of the agricultural products of 1890; and no room is left for doubt that agriculture had thus been left in a subordinate position. This is greatly emphasized by the census of 1900. Agriculture reports a gross value of \$4,740,000,000; manufactures a "net" value of \$8,370,000,000, or nearly twice that of agriculture. This is a demonstration entirely at variance with the common understanding and belief. The development of our agricultural resources has been so rapid, and has become so important in the food supply of the world, that economists have overlooked the much more rapid growth of manufactures in the last twenty-five years. M. Emile Levasseur, the distinguished French economist, whose studies of census statistics, in connection with his great treatise, "The American Workman," brought him face to face with it, simply refused to accept it. "I cannot believe," he wrote, "that a value greater than that of the product of agriculture has been added by the processes of manufacture."

TRANSCERENCE OF INDUSTRY FROM FARM TO FACTORY.

M. Levasseur's incredulity is due to his failure to appreciate the remarkable advance of manu-

factures into the domain of agriculture. The factory system gradually destroyed the household and neighborhood industries, and it steadily pursues its encroachments upon the farm. The great Southern industry of cotton ginning, formerly performed exclusively on the plantation, is rapidly passing over to large and thoroughly equipped establishments, which gin the crops of great areas. In 1870, the census did not report a pound of butter made in factories; in 1880, 30,000,000 pounds, out of a product of 807,000,000, was factory made; in 1900, the factory product of butter was 420,126,000 pounds, out of a grand total of 1,492,699,000 pounds, the factory product being 28.2 per cent. of the whole. Cheese making shows a still more remarkable transformation. In 1860, there was no cheese making in factories reported. In 1870, the factories made more than one-half our cheese; and in 1900, the farms made but 16,372,000 pounds, or less than 6 per cent. of the whole product of 300,000,000 pounds.

Illustrations might be multiplied indefinitely to show the encroachment of the factory upon the function of the farm. Indeed, it is becoming a most difficult matter for the census makers to determine where to draw the line between agriculture and manufactures in many branches of industry. But the farm is the twin sister of the factory; they flourish or are depressed in perfect sympathy; and American supremacy in manufactures is due, in very large degree, to the abundance of our agricultural products. Of the raw materials consumed in manufactures, agriculture supplied \$1,940,727,000 in value, or 81.2 per cent. of the total; the mines supplied \$319,975,000, or 13.4 per cent. in value; and the forests \$118,803,000, or 5 per cent. of the total; while from ocean, lake, and river came only \$9,635,000, or 0.4 per cent. The farmer and the manufacturer are bound by an umbilical cord, and together they share prosperity or depression.

THE SCIENTIFIC GROUPING OF STATISTICS.

The twelfth census is the first to divide the manufacturing industries of the country into groups, or families, on the basis of the raw materials employed, or the kindred uses to which products are put. The relative importance of the several families of industry is thus clearly shown. There are fifteen of these great industry groups, six of which reveal a gross value of products exceeding one billion dollars each. These great family groups of industries are divided into numerous classes, 354 in number, regarding each of which the census gives detailed statistics. These 354 classes of industry correspond, in a

measure, to the "species" of natural history, while the fifteen grand groups are analogous to the "genera," the whole making the great "order" of manufacturing industry. Thus the twelfth census has found it possible to treat the statistics of manufactures by scientific methods, unifying the fundamental resemblances, and measuring the relative importance of each distinct group.

We can thus trace in the statistics the most notable of all the modern tendencies of manufacture, that toward greater specialization in every group, a movement in which the single establishment tends more and more to confine itself to one product, or even to single parts of a product, —to the making of yarn for mills which simply weave, as an illustration. This specialization permits the successful utilization of smaller capital, in individual mills, than would be necessary if each establishment must begin with the raw material and carry it forward, through many expensive processes, to the finished article. The processes are fewer, the turn-over quicker, and the results are often better, through closer supervision and the concentration of expert skill upon the perfecting of a single article. It is specialization, therefore, which enables an increasing number of comparatively small establishments to exist and to flourish side by side with an increasing number of very large establishments. It is specialization which justifies the belief that the giant corporation, or industrial combination, is not destined to swallow up and obliterate all the smaller mills and factories of the land.

At the head of the fifteen grand groups of industries stands the manufacture of food products, producing \$2,277,702,010, or 17.5 per cent. of the total gross value of products. The other groups are (2) textiles and their re-manufacture, with products valued at \$1,637,484,484, or 12.6 per cent. of the whole; (3) iron and steel, and their multitudinous products, valued at \$1,793,490,908, or 13.8 per cent. of the total; (4) lumber and its remanufactures, \$1,030,906,579, 7.9 per cent.; (5) leather and its products, \$583,731,046, 4.5 per cent.; (6) paper and printing, \$606,317,768, 4.7 per cent.; (7) liquors and beverages, \$425,504,167, 3.3 per cent.; (8) chemicals and allied products, \$552,891,877, 4.3 per cent.; (9) clay, glass, and stone products, \$293,564,235, 2.3 per cent.; (10) metals and metal products other than iron and steel, \$748,795,464, 5.8 per cent.; (11) tobacco, \$283,076,546, 2.2 per cent.; (12) vehicles for land transportation, \$508,649,129, 3.9 per cent.; (13) shipbuilding, \$74,578,158, 0.6 per cent.; (14) miscellaneous industries, \$1,004,092,294, 7.7 per cent.; (15) hand trades, \$1,183,615,478, 9.1 per cent.

This grouping is necessarily somewhat empirical; but it serves in a general way to bring out the relative importance of industries, from the point of view of the value of products. That this is not the true measure of relative importance from the economic view-point is shown from a further analysis. While the manufacture of food products stands first, in value of products, by reason of the intrinsic value of the raw materials operated on, it sinks to the seventh rank in number of persons employed, and to the eighth in amount of wages paid. Textiles and their re-manufacture rank first in number of employees, and second in amount of wages paid; while iron and steel, ranking second in number of employees, stands first in wages paid. It is evident, therefore, that, in an economic sense, these two are the most important among the great industrial groups.

THE PRODUCTS OF HAND LABOR.

The last of these groups includes what are known as the hand trades, as distinguished from manufactures proper, and they are now for the first time segregated and treated as a separate and distinct form of industry. They embrace the building trades, like carpentering, masonry, painting, etc., and millinery, repairing, custom boot and shoe making, etc.; they employed 559,130 persons, in addition to 242,154 proprietors, and returned a product of \$1,183,000,000, or less than 10 per cent. of the whole. As recently as 1869, in an article in the *Atlantic Monthly*, Gen. Francis A. Walker, the superintendent of the ninth and tenth censuses, stated that the contribution to the wealth of the country by its artisans or hand workers was far more valuable than that of its factory workers. If this was true at so late a date as 1869, the change from hand trade work to factory production has since been tremendous.

STATISTICS OF THE TRUSTS.

Perhaps the most interesting showing made by the twelfth census of manufactures is that regarding the so-called "trusts," or industrial combinations. The census makes a separate report for these corporations, of which it was able to locate 185, controlling 2,040 plants, located in many States, employing 400,046 persons, or 8.4 per cent. of the 4,749,276 employed in all the manufacturing industries, exclusive of the hand trades, which obviously are not susceptible to this form of organization; paying \$195,122,980 in wages, out of a total wage of \$2,034,215,456, or 9.6 per cent., and producing goods to the value of \$1,667,350,949 out of \$11,820,784,665, or 14.1 per cent. of the whole. These figures indicate with approximate accuracy the proportion of our manufactures that was controlled by

industrial combinations in 1900. It is not so large as is generally supposed; but it is considerably larger to-day than when the census was taken, and it shows very striking variations in the different groups of industries. It is lowest in the lumber manufacture, where only 2 per cent. of the product was made by trusts. In the textiles only 4.4 per cent. was so made, and in the leather industries only 7.8 per cent. But in the chemical manufactures, 33.4 per cent. of the total product was trust-made; in liquors and beverages, 22 per cent.; in metals, other than iron and steel, 24.1 per cent.; and in the iron and steel industry, 28.4 per cent. Since the census year the United States Steel Corporation has been organized, and in consequence the percentage of the total product of iron and steel controlled by industrial combinations is now very much greater than in 1900, and undoubtedly greater than in any other branch of industry.

An interesting exhibit connected with industrial combinations shows the actual investment of capital, as returned to the census, and the nominal investment represented by the bonds and common and preferred stock issued by them. Their actual investment in manufacturing, including the value of land, buildings, machinery, and all live assets, was \$1,461,631,743, as compared with \$3,093,095,868, the amount of securities issued; thus but 47.3 per cent. of the bonds and stock issued by these industrial combinations represented actual investment, such as is covered by the general census inquiry. The excess is what is commonly known as "water," and is based upon the assumed earning power of the corporations. It is not all water, however, because there are certain intangible assets, such as patents, trade-marks, "good will," etc., not represented in the census totals, and certain tangible assets, such as iron mines, railroads and steamboats, woodlands, etc., which are not directly employed in manufactures, and are therefore not included in the census return. That the public has already discounted the inflation of value represented in the difference between the two sets of figures is sufficiently evident upon a study of the quotations of the stock exchanges. The difference between the par value of these industrial securities and their value on the basis of actual investment is about the same as the difference between the par value and the market or selling value.

FACTS REGARDING VARIOUS INDUSTRIES.

The four mammoth volumes devoted to the census of manufactures are full of suggestive items of information about individual industries. For instance, it appears that the total production of liquors, distilled, malt, and vinous, in the

census year, was 1,325,000,000 gallons, a *per capita* consumption of seventeen gallons. There still appears to be work for the temperance societies. Nearly ten billion ordinary toilet pins were manufactured, besides 161,000,000 hairpins, and as many more safety pins. The old conundrum,—where do all the pins go?—is as far as ever from a satisfactory answer. The manufacture of steel pens reached 1,764,000 gross; and of lead pencils, 1,660,000 gross. Of boots, shoes, and slippers, 219,235,000 pairs were manufactured, and there were 49,979,000 pairs of rubber boots and shoes made besides; there appears to be no reason why any of our people should go barefoot. Of carpets of all kinds, 75,532,000 running yards were manufactured. Of woolen and worsted piece goods, 399,141,000 square yards were made, more than five square yards to a person; so that none of our people would seem to need to go naked. Of cotton goods there were woven the enormous quantity of 4,509,750,000 square yards, equivalent to nearly sixty square yards for every man, woman, and child in the country. Of hose and half-hose, 29,891,000 dozen pairs were made, and of knitted shirts and drawers, 15,819,000 dozen,—these two branches of manufacture representing forms of wearing apparel which less than sixty years ago were exclusively made by the women of the household. Perhaps no figures in the whole census mass illustrate more effectively than these the complete revolution in household economy which machine manufacture has brought about. It has relieved the woman of the largest part of her home duties, and thus driven her into the factory, the store, and the office. Of collars and cuffs, 121,000,000 were made in the factories, having a value of \$9,000,000. Fifty years ago a factory-made collar was practically unknown. Pianos to the number of 171,000 were made in the census year, not counting organs and melodeons; and the question is, where do they all go? No better test of the general prosperity of the masses of our people can be cited than the fact that they absorb this number of pianos, an absolute luxury, in a single year of good business. Of watch movements, 2,124,000 were made, exclusive of 1,211,000 cheap, or "dollar" watches, made in clock factories. Of typewriters, 145,000 were made, valued at \$5,624,000. As recently as 1872, not a typewriter had ever been marketed, and in the interval this American invention has revolutionized the correspondence of the world. Of sewing machines, 747,000 were made, exclusive of 55,000 sewing machines for factory use. Of bicycles there were made 1,113,000, a much smaller number than the average production of a few years ago, but enough to show that the bicycle has staying powers.

AN INSTANCE OF PROFIT-SHARING.

BY SAMUEL CABOT.

TO any one who looks at the present industrial situation from either a utilitarian or a humanitarian point of view there must be much that seems most lamentable in the attitude of employer to employed, and still more in that of employed to employer. As the writer intends to give a short description of his own experiences and efforts, there are obvious reasons why he should pass by the humanitarian aspect of the question and lay chief stress upon the advantages from an economic point of view, both to labor and capital, of a more cordial coöperation.

Any one who has really watched the work of the operatives in a textile mill or print works from within, and for any considerable period of time, must be impressed with the conviction that if their work were for their own individual benefit, the amount accomplished would certainly in many cases reach 30 per cent. more, and in most at least 20 per cent. In addition to this, the economies of material and the saving of machinery would also be much greater. If the work is paid by the day, and not by the piece, this difference would of course be more marked, but even in piecework the gains possible for an interested operative as contrasted with an uninterested one may easily exceed the estimate above.

The writer having worked in such a mill, had these truths early "proned inter him," as the negro philosopher, Uncle Remus, expresses it. It thus became a settled purpose in his mind that he would try—in case he ever had occasion to run a factory of his own—to make the employees interested in economy and thrift on their own account. This he has now been able to do; and as it has been carried on for a period of fifteen years, the plan may be said to have passed the experimental stage.

The arrangement is a very simple one. Each operative who wishes to take part in the profit-sharing is required to sign a paper agreeing to give a notice of sixty days before leaving, and also to do all in his power to save expenses; and, in short, to render the business successful. In consideration of this a certain proportion of the net profits—known only to the proprietor, but always the same proportion—is divided among the profit-sharers *pro rata*, according to their wages, during the period just elapsed. In the writer's case the profits are calculated every six months. The profits are paid—one-half in cash to the participant, and one-half is placed in a savings bank

by the proprietor as trustee for the employee. If the employee dies in the service, his heirs are at once entitled to the accumulated fund in the savings bank, with interest.

If the operative desires to leave the works, and gives the required sixty days' notice, the fund remains at interest two years in the bank, and is then handed over to the operative, provided he has not sold the secrets or formulas he may have learned in the course of his employment in these works.

In case the employee should not keep his part of the agreement—should, for instance, organize a strike, stopping work without the required notice of sixty days—his accumulated profit, which is only contingent upon his adherence to the promises made to the employer, does not come back to the latter, but is divided into two equal parts, one of which is apportioned in cash among the operatives who have adhered to the their bargain, and the other is added *pro rata* to their funds in the savings bank. It seems to the writer that it is of great importance that the money once divided should never come back to the employer again, as otherwise it would give room to suspicion that men were discharged in order to obtain their accumulated savings. If a man is discharged for cause, the employer has the right to turn his accumulation over to the faithful men who have kept their promises. There has been—in the writer's experience—but one attempt to systematically break this agreement, an attempt early in the arrangement to organize a strike. The result was a loss on the strikers' part of a considerable sum of money and the division of that sum among those who respected their promises. The strike lasted two days, and has never been repeated, the strikers begging to be taken back on the old terms.

And now in regard to the results. It is, of course, obvious that absolute tabulated figures are impossible in such a case, as much of the effect must be too subtle to be chronicled in dollars and cents. It is, however, the firm conviction of the writer that his men have given him a return upon the investment made fully equal to that which one ought to expect. The earnestness and diligence of the workmen seem much above the average, and moreover the thousand-and-one economies which are so important in an industrial plant are more than usually observed. In fact, from careful observation, it seems unquestionable that the advantages far outweigh the cost.

The class of workmen is not above the average of those in a silk or print works, yet the savings in the bank reaches already \$500 in many instances, and much more in a few.

The profit distributed among the thirty-five to forty sharers averages a little over 14 per cent. of the total wages they earn, and a considerable number of them have already received more than \$1,000 apiece in profits.

Although the sum distributed has been over \$25,000, the writer believes that the immunity from strikes for so long has been well worth the expenditure, leaving the much increased industry and economy as a profit to the employer.

In many instances this system might be modified to advantage, as, for example, by allowing the operative, after a term of years, to mortgage his bank savings to the employer. He could in this way be encouraged and enabled to build a home at an earlier date than he could otherwise hope to do. Such an arrangement would be also an advantage to the employer by increasing the number of permanent workmen of experience in the neighborhood of his establishment. But many other modifications will doubtless occur to the reader, and it is not the purpose of this paper to dogmatize upon the subject, but merely to state facts and results.

THE BONUS SYSTEM OF REWARDING LABOR.

BY H. L. GANTT.

AWARDING extra compensation for extra work has long been the practice in successful manufacturing; but the particular method of awarding a *bonus* above referred to is of recent origin, and fills an important need in modern systems of management.

It may be briefly described as follows: Alternative ways of doing a piece of work are carefully investigated by the most competent expert available and the results recorded. The best method is determined and taught to an ordinary workman, who is awarded extra compensation in addition to his day's pay for doing the work in the time and manner specified.

This method of compensation was the outcome of an attempt to introduce in complicated work equitable piece rates determined as nearly as possible by scientific methods.

To understand the subject thoroughly it is necessary to become familiar with the work of Mr. Fred. W. Taylor, who was the first to apply the scientific method to the investigation of ordinary labor problems, for this system was a direct outgrowth from his work.

MR. TAYLOR, THE PIONEER INVESTIGATOR.

In the early eighties, Mr. Taylor, then in the employ of the Midvale Steel Company, became convinced that the scientific method of investigation was the only means of finding the best solution to the various problems with which he found himself confronted; and, whether the problem was that of managing a machine shop or of shovelling coal, he remained firm to his convictions, and did his best to obtain his conclusions by that means. Conscious that his method was correct, he maintained his faith in

the results, no matter how much they differed from previous ones, and often had the satisfaction of accomplishing what had been declared impossible.

The fact that Mr. Taylor combined the knowledge and methods of the scientist with the experience of a practical mechanic, enabled him to bring to bear the scientific method on ordinary mechanical problems in a most efficient manner, and his experiments to determine the laws that govern the cutting of metals is most noteworthy, inasmuch as he not only had to investigate a problem having a large number of unknown quantities, but had to develop a method of investigation of a problem which had been declared by engineers and mathematicians alike incapable of solution. That the problem has been solved, at least in part, is evidenced by the fact that slide rules embodying the laws of cutting steel have been in practical operation for more than two years.

THE OUTPUT OF MACHINE SHOPS DOUBLED.

This investigation has had, aside from its main object, a most important result, for it has developed a method of making in a few hours a scientific determination of the value of a tool steel for any given purpose; this very important art has in the past been so imperfectly understood that as a rule tool steel has been sold more by the merits of the salesman than by its own. With the new ideas this condition will before long be a thing of the past, and opinions will give place to facts. Again the application of the scientific method to the investigation of ordinary mechanical problems has often disclosed facts previously unsuspected. Most notable among

these was the discovery made by Messrs. Taylor & White in testing tool steel, that certain kinds of self-hardening steel had an important property previously unsuspected. By taking advantage of this property, and making use of it under a proper system of management, it is possible to practically double the output of a majority of the machine shops in the world.

THE SCIENTIFIC STUDY OF WHAT A MAN CAN DO.

The value of scientific knowledge to engineering and industry has long been recognized, and the great advances that have been made in this country and in Germany are due largely to the fact that such knowledge has been applied; but the idea of making a scientific study of what a man or a machine could do was new, and so complicated that few looked upon it with favor.

A workman was allowed to do the best he could with the appliances he liked, and a machine or a tool was expected to do what its builders claimed for it. An effort to get more work out of a man or a machine had been made by paying for the amount of work done instead of for the time taken; in other words, by the introduction of piecework in place of daywork; but the knowledge of how much a man or a machine could do was so vague that piece prices set by records or "judgment" were invariably found to be wrong, and the attempt to change them has caused more labor trouble than all other causes combined.

Eliminating, then, the method of setting piece rates by "judgment" and by previous records, the method of investigation or experiment was the only one from which anything could be hoped. No two men worked exactly alike, and few used exactly the same tools. The capacity of a machine and the best method of operating it were seldom what its maker stated. That there is a best method of doing a piece of work, or that there is a best method of operating a machine, and a maximum capacity for that machine, are not doubted, but the problem of determining them was something for which there was no guide except the general principles of scientific investigation.

A GREATER OUTPUT, AND GREATER REWARD, OF LABOR.

Believing firmly that if piecework is to be permanently successful the rates must be properly fixed in the beginning, and not "cut," Mr. Taylor undertook to determine by the above method the amount of work to be expected, and fixed his piece rates accordingly, with the result that men provided with the proper appliances, educated in the best methods, and given a piece rate that was

permanent, have produced a greater output at much less cost than under the older method, at the same time earning larger wages.

The difficulty about this method is that the investigation is often long and tedious, for no permanent rate should be set until we know the best method of doing the work, and the exact time it will take a good man to do it.

For financial reasons it is frequently impossible to wait for a complete scientific investigation of every condition before fixing a rate of pay, and the need of a means of making use of a partially completed scientific investigation, or of what knowledge we have, has long been felt. Piecework will not do it satisfactorily, for it is not desirable, or even feasible, to change rates frequently, as the workman never feels settled, and is continually afraid of having his wages reduced. This unsettled feeling, which always accompanies the old-fashioned method of rate setting, is the source of the opposition to that type of piecework, and the reason why so many men prefer daywork at smaller wages.

The first requirement, then, of any system aiming to take advantage of a partially completed investigation is that, no matter what other changes are made, *the workman's weekly pay shall not be reduced.*

THE LAWS GOVERNING THE OUTPUT OF LABOR.

It is a well-established fact that a man who is working at day's wages never does work to his maximum capacity, but will do so if he can be sure of earning a commensurate additional compensation. If the work is light, and does not require much physical effort, this additional amount may be as low as 30 per cent. of his day rate. If, however, the work is hard labor, and he becomes physically tired at the end of the day, he requires 50 per cent. additional to make him put forth all his energies; and if, in addition to the physical strain, the conditions under which the work is done are unpleasant, such as severe heat, he requires 70 or 80 per cent. additional to make him do his best.

THE WORKING OF THE "BONUS SYSTEM."

These facts, which have been established by history, enable us to take advantage of the results of a partially completed investigation; for, if we set for a day's work such a task as our investigations prove can be done, and offer for its accomplishment the proper premium or "bonus," in accordance with the facts just stated, we shall find a very large proportion of men ready and willing to do the work in the manner and time specified in order to earn the increased pay. This, then, is the 'bonus system,' which was

first introduced by the writer in the works of the Bethlehem Steel Company. It consists of teaching an ordinary workman to do a piece of work by the best methods we can devise, and asking him to do it in the time it would take a good workman. If he accomplishes the task in the time set, he is given the wages of the good workman; otherwise he gets simply his own day rate. Aside from the educational effect, which is most marked, the result of this is that many ordinary workmen, who lacked only incentive, promptly take their place among those that naturally have more ambition, and the general moral tone is elevated.

When we write out a set of instructions according to the results of a partially completed investigation, the remaining information will, in the long run, generally be found out either by the expert who is making the investigation or the workman. In the first case, a new set of instructions is made out in accordance with the additional information and the proper bonus set. In the second case the same thing should be done, but in addition the workman discovering or devising the improved method should be given a cash compensation commensurate with the value of the improvement, which should thereafter belong to his employer. By such a system the workman is encouraged to be something more than a machine, for he is first taught the best knowledge available, and paid for learning more.

THE ADVANTAGES TO WORKMEN AND EMPLOYER.

Add to the satisfaction that comes with increased wages honestly earned, increase in quantity, and, as experience has shown, improvement in quality of work at a lower cost, and we have a condition that rapidly tends toward prosperity for all concerned.

As in any manufacturing establishment it is important to obtain the maximum output from the plant, it is very essential that the maximum product should be gotten from every machine, and the fact that a man loses his bonus when he fails to get out this maximum product is a very big factor in accomplishing the desired result, for he learns to take care of his machine or tools, and complains promptly if his work is interfered with.

Again, those who are indirectly connected with the output, such as foremen, men who supply material and appliances, and those who repair machines, all should receive a bonus in proportion to the number of men that produce the maximum output, and the whole makes a system that is as nearly automatic as is possible; for what is for the good of one is for the good of all, and a man who will not do his duty soon finds that he is in the wrong place.

EXACT BOOKKEEPING FOR LABORING OPERATORS.

This description of the principles on which the bonus system is founded gives but little idea of how it is carried out, but a very little thought shows that proper appliances for doing the work and a complete and exact system of time and record keeping are the first essentials. Thanks to the recent advances made in the art of doing such work, an exact system of keeping time, records, and costs can to-day be made a source of economy by preventing the errors and waste which always go with those methods which depend upon verbal reports and memory.

It has long been the custom to keep a daily record of cash, which must balance to a cent. Modern methods require that we shall keep a daily record of labor and material, and the bonus system in its best development compels a modern system of management in that it requires that we shall at all times know the work done and to be done, and the means for doing it. Such a system requires that work for men and machines should be laid out as fully as possible the day before, which has a strong tendency to do away with delay and idleness, which are expensive alike to the manufacturer and the bonus workman.

That such a system requires more organization than the ordinary shop possesses is not denied, but few realize how little such organization costs, and how many times it pays for itself in the course of a year.

OUTPUT OF THE BETHLEHEM COMPANY DOUBLED.

The principles above outlined were applied during the spring and summer of 1901 to the ordnance and armor-plate machine shops of the Bethlehem Steel Company, and resulted in a short time in more than doubling the output of those shops. The system is still in use substantially as introduced, and the superintendent, Mr. Archibald Johnston, in his testimony before the House Committee on Labor, February 13, 1902, makes the following statement regarding it: "This arrangement has worked very satisfactorily, both to the men and the company, for it has enabled us to get work out more quickly, and to add to the producing capacity of our invested capital; while for the men it has been a great benefit, as we have many instances of employees who have bought homes for themselves principally from their extra earnings on the bonus system, and from overtime work. *The system has been a stronger incentive to industry than any other we have been able to put into effect in our plant.*"

The cause of this result is not hard to find, for the men, realizing that their interests are being cared for, give their coöperation.

IMPROVED CONDITIONS IN THE AMERICAN FARMER'S LIFE.

BY CLARENCE H. MATSON.

FOR several years students of social and political problems have been discussing the tendency of rural communities to rush to the cities and the impending evils resulting therefrom. They have watched with alarm the manner in which urban populations have increased at the expense of the country, and they have sought a solution to the problem of how best to stop it.

But like many another vexatious question, this one bids fair to solve itself. In the East the well-to-do are beginning to leave the cities and are seeking rural homes. They are realizing that the city saps their strength and vitality, which can best be regained "next to the soil," living in the open air of the country and in contact with trees and birds and flowers.

In the West still more potent influences are beginning to keep the agricultural classes on the farms. The forces that impelled the country boy to the city to seek his fortune are losing their power. This wonderful twentieth-century development of ours is bringing about a revolution in farm life. The farm telephone, rural free mail delivery, the traveling library, and rural school consolidation are tending to make farm life more attractive, and remove from it many of its objectionable features.

The chief cause of the exodus from country to city has been the isolation and loneliness of farm life. Especially has this been true in the West, where farms are large and neighbors are far apart. The majority of the inmates of the insane asylums in some Western States are women; a large per cent. of them farmers' wives, sent to the insane hospitals, according to medical experts, by the melancholy induced by isolation. The farmer's children have felt this influence too. They have usually been compelled to help about the farm work during the day, and when night came they had little in the way of books and papers to amuse them, and neighbors were too far apart for frequent gatherings. The monthly trip to the county seat allowed them was a great event to the children, and it is little wonder that they found the town attractive. As they grew older the fascination of town life grew upon them. Sometimes they were sent to the town to attend the graded school, and this increased the irksomeness and loneliness of the farm

when they returned to it, with the result that the boy left the farm to seek his fortune in the city.

But now all this is changing. Rural free delivery of the mails is taking daily papers and illustrated magazines into the farm homes. The telephone is connecting neighbor with neighbor and with the surrounding towns. Late books follow the magazines into the homes of those who can afford them, and the traveling library supplies those who cannot purchase the books. The consolidation of rural schools, while only in its incipient stage, gives promise that it will supply the boys and girls of the farms with the advantage of a high-school education without the necessity of leaving their homes.

In discussing these new conditions in the West, I shall speak primarily of my own State, Kansas, because I am more familiar with the changes in farm life in that commonwealth.

RURAL FREE DELIVERY OF MAIL.

Four years ago there were only three rural delivery routes in Kansas, and they did not amount to anything. At that time the Post-Office Department determined to give the free delivery of the mails in the country a thorough test. To-day there is scarcely a county in the State, except the cattle-range country of the extreme western portion, that has not from three to twenty routes. In some counties practically every farmer has his mail delivered to him daily, even though he lives ten miles from his post-office, and those communities which are not already served are clamoring for an extension of the service.

For the little sum of two cents the United States Government will carry a letter from New York to Kansas and place it in the hands of the farmer to whom it is addressed, perhaps out in his cornfield miles away from his post office, and all within the shortest possible time. Under the new system, without leaving his farm the farmer can buy a money order and send it East for a year's subscription to a magazine, or for some article which has caught his fancy. This system has been a wonderful help to the mail order book business. The rural delivery carrier has brought the farmer into the habit of reading and writing more than formerly. A few years ago the writ-

ing of a letter also involved the task of taking it to the post office, and in a busy season the trip was not usually made oftener than once a week. But now, when the letter is written, it has only to be placed in the box by the farmer's gate, and the Government does the rest. Formerly the farmer's reading was largely confined to his local paper and the weekly edition of some metropolitan daily. Now the weekly edition no longer suffices him; he has learned the value of the daily. He wants his market reports every day, and he is as anxious for the current news as is the merchant in the large town. He was as interested in reading the details of the Martinique volcanic eruption as was the professional man, and he discussed it a great deal more with his family and his neighbors than did the man in the city. It is a fact that a majority of Kansas farmers who are served by rural mail delivery are subscribers to one or more daily newspapers. The farmer takes more interest, too, in agricultural papers, and from them he gets new ideas about his work.

FARM TELEPHONES.

Closely following the rural delivery of the mails has come the farm telephone. There are thousands of farm homes on the prairies of Kansas which are in telephonic communication with the surrounding towns within a radius of fifty miles or more. Seven years ago the telephone was a novelty even in towns of five and ten thousand inhabitants. But with the expiration of the Bell patents it became more common. In time it was introduced into towns of only one and two thousand people, and to-day there are dozens of little places of six hundred inhabitants or less which support a flourishing telephone exchange. To aid in the expense of maintaining these small exchanges, "party lines" were run two or three miles out from the towns in several directions, and a number of farm-houses were placed on each line. Toll lines were built between exchanges, and farmers along the route were also connected with these. The telephones proved such a blessing that farmers more remote from the towns began to organize mutual companies of their own, a company taking in an entire community for miles around. This mutual company connected with the nearest exchange, where it met the lines of other mutual companies in other parts of the same county. These companies are so popular, and the demand for telephone apparatus is becoming so great throughout the West, that numerous telephone-supply companies have been formed, and the manufacture of farm telephones has become an industry of considerable importance. The farmers usually build their

own lines, employing an electrical expert to install them. There are numerous instances in central Kansas where wire fences are utilized for miles for telephone lines.

The benefits of the farm telephone can scarcely be overestimated. If a farmer breaks a bolt in his machinery, he telephones to his hardware dealer, and the rural mail carrier brings a duplicate of the broken part to the farmer on his next trip, perhaps only two or three hours after the break. If a physician is wanted, the telephone saves much valuable time—perhaps a life—and possibly a fifteen-mile ride on a stormy night for the farmer. If the farmer's wife is lonesome, she can take down the telephone receiver and visit with any of her neighbors for several miles around. If the farmer wants his neighbors to help him thresh, he can summon them in as many minutes with the telephone as it would require hours without it; and in Jewell County, Kan., some of the farmers' wives who have telephones have formed the habit of telephoning to town each morning for their groceries, perhaps six or eight miles away, and the rural mail carrier delivers them in time for dinner. The value of the telephone was especially demonstrated the past winter when the weather bureau sent out a bulletin that a severe storm was approaching. The news was telephoned from neighbor to neighbor, giving the farmers twelve hours to gather up their stock and haul feed in anticipation of the storm, which would otherwise have caught them unawares.

THE "MAIL ORDER" BUSINESS AND THE RURAL MERCHANT.

It is true that rural free mail delivery is proving disastrous to the country merchant who is not progressive enough to meet the changed conditions, but the farm telephone will help to readjust these things. The mail-order houses of the big cities have not been slow to take advantage of the new order of things, and they have flooded the farmers with mail-order catalogues. They have come into direct competition with the country merchant; and as it has been possible to buy of the mail-order house without leaving the farm, the farmer has frequently given the country merchant the worst of it. It is so easy for the farmer to sit down in the evening after his work is done and pick out a bill of goods by his own fireside from the catalogue of the big city firm, and to send for it with a post-office money order, also without leaving his farm, that the money-order business of the Post-Office Department has vastly increased in communities having rural delivery. But with the farm telephone added, the country merchant will again have the ad-

vantage, for he can personally solicit trade at any time he wishes, and he can use the rural mail carrier as his "delivery boy," sending out the goods the same day the order is received.

TRAVELING LIBRARIES.

Along with rural delivery and the farm telephone, but having no connection with them, has come the traveling library. Kansas was one of the first States to adopt this new idea for the improvement of rural life. That was less than four years ago, but now a large percentage of the States of the Union have traveling libraries in some form.

The people in the cities and larger towns generally have access to public or circulating libraries, but for years it has been a problem how to extend the same privilege to the residents of agricultural communities. The traveling library is designed to solve this question. Any country lyceum or club can secure a library of fifty books, free of cost, by applying to the librarian in charge of the traveling library, who is now a State officer in Kansas. A library may be kept in one community for six months if desired. It is then returned to the librarian, and another, containing an entirely different assortment of books, may be secured. One library will furnish a winter's reading to a rural community.

In Kansas the club women inaugurated this movement, but it proved of such great benefit that after one year the State Legislature took it up and made it a State institution. It now consists of upward of one hundred libraries, of fifty books each, and it is being added to as fast as legislative appropriations become available.

CONSOLIDATION OF COUNTRY SCHOOLS.

The educational problem in rural communities is still unsolved to a great degree. Heretofore it has been customary to send the more ambitious children, whose parents could afford it, to the graded school in town after they have passed through the district school, where perhaps the school term was only five or six months long. Sometimes this has furnished a strong incentive to the farmer to leave the country and move to the town or city, in order that his children may have the best in the way of educational advantages.

While it is still a new idea to many people, the consolidation of rural schools bids fair to bring directly to the farm the educational advantages of the town. The plan has been tried in a small way in Ohio, in Iowa, in Kansas, and in

other States, and it has been remarkably successful. The last Kansas Legislature passed a law to make the plan general wherever communities desire it, and Prof. Frank Nelson, State superintendent of public instruction, has made it his special work to encourage the adoption of the plan. Superintendent Nelson has become the apostle of school consolidation in Kansas.

Several years ago four school districts around Lorraine, Ellsworth County, Kan., were consolidated, and a central schoolhouse was built at the village of Lorraine. After the consolidation three teachers did the work which required four formerly, and as the school was graded they did it better. Some of the children lived several miles from the schoolhouse, but they were transported to and from school in covered spring wagons at the public expense. Last year a two-years' high-school course was added to that of the common school, and now the entire cost of maintenance is but little more than that of the four separate districts before the consolidation. The extra expense is largely due to the transportation of the pupils. To offset the small additional expense the term is considerably longer, the work much better done, the high-school course has been added, the schoolhouse is much more sanitary, and the advantage of transporting the children to and from school, especially in bad weather, can scarcely be estimated. The consolidation idea is growing rapidly in Kansas, and movements to consolidate rural districts are now under way in many counties in the State.

EASING THE BURDENS OF LIFE ON THE FARM.

These are some of the main reasons why farm life is more attractive in the West than it was a few years ago. There are other minor ones. With increasing knowledge and intelligence the farmers are putting more of science into their work. Improved machinery is making the farm-work lighter. The well-to-do are establishing acetylene gas plants in their homes, alleviating the heavy housework which falls to the lot of the farmer's wife. The gasoline engine, too, is supplying the place of the city waterworks.

There will doubtless always be a certain flow from the country to the city. It should be so. The city needs the vitality and strength of the country boy. But the rush from the farm to the large centers of population, to escape the hardships and isolation which have been a part of farm life in the past, will probably cease to a great degree.



THE FARMER'S BALANCE SHEET FOR 1902.

BY WILLIAM R. DRAPER.

THE season of greatest activity upon the farm has ended, and now the agriculturalists of this country are beginning to compute their profits for 1902. Wheat has all been harvested, corn is matured beyond the point of danger, and other cereals are safe for the season. Pasturage was never in better shape for the grazing herds, and only the cotton crop seems to be seriously affected. Cotton is not so badly drought-bitten but that the growers can come out with a handsome profit.

VICISSITUDES OF THE SEASON.

A few weeks prior to the wheat harvest the usual cry of hot winds and droughty conditions in the grain belt went forth, but when the harvest came it was found that wheat was safe. In the Northwest wheat harvesting was delayed by heavy rains, and along the north Pacific coast considerable, but not serious, damage was done to grain in the shock. In the Southwest the harvest progressed without a hitch, so far as favorable weather was concerned. The principal difficulty was in securing sufficient harvest helpers. The spring wheat crop, which is the principal one of the Northwest, was considerably damaged by hail in the Dakotas. Notwithstanding this slight interference the condition of wheat, as viewed by government experts, gradually improved as the season came to an end. Nebraska, this year, claims the largest wheat yield per acre. This record was previously held by Wyoming.

During the early part of August a hot wave struck the corn fields of Kansas, and threatened to burn them before the ears had matured, but the intense heat lasted less than one week, doing less than 3 per cent. damage to growing corn. Cool weather and general rains followed, and the corn is now safely matured. As a whole, the corn made excellent and unhampered progress throughout the growing season. This record of weather conditions is unusual.

Early in August the cotton crop began to improve, and there is a possibility that the drought, shredding, and rust which threatened to wipe out the profits of cotton growers of the South will not, after all, seriously affect the result.

ONE OF THE "RECORD" CROP YEARS.

This has been one of the best "good all-around" years in the history of agriculture.

Wheat was blighted in portions of the country in early spring and during the past winter, while heavy rains during July damaged the corn to some extent in the Lake, upper Mississippi, and lower Missouri regions. But otherwise the crops have been attended and assisted by favorable rains and sunshine throughout the growing seasons. As always, the scare of a ruined wheat crop was started in early summer, but it was found after harvest that the crop had fallen short of last year's enormous wheat yield by 50,000,000 bushels, while corn for 1902 exceeded the crop of 1901 by 1,000,000,000 or more bushels. Other cereals will be above the ten-year average.

The Northwest is producing the largest crop of wheat, barley, oats, and flax ever recorded, while Kansas is coming forward with a "bumpier" corn crop; even in excess of 1889, when corn was burned for fuel and sold at 10 cents per bushel. As a result of the bounteous harvest, a bearish feeling possessed the speculators, and grain "sold off" steadily. Once the "corner" in corn and oats had been broken the market took the natural downward trend.

THE TRANSPORTATION PROBLEM.

The railroads entering the great corn and wheat belts, instead of offering reduced rates to ship, in the grain, as was made to some drought-stricken communities in 1901, will be overtaxed in hauling the cereals to market.

Farmers along the Pacific slope won a decisive concession from the transportation companies prior to Eastern grain shipments this season. A flat cut of 10 per cent. in freight rates on wheat was made by a number of the trunk lines. The farmers asked for a deduction of 33 per cent., but under the new arrangement the wheat growers of Oregon, Washington, and California will increase their profits 3 cents per bushel. This will be a saving of hundreds of thousands of dollars to the Western grain growers.

THE YIELD OF CEREALS.

Cereal crops for the year of 1902 have not all been gathered, but experts have reported upon their yield, and these approximate reports, submitted several months ahead of the Government reports, have proved very nearly exact in the past. Approximately stated, the yield is as follows: Wheat, 700,500,000 bushels; corn, 2,589,951,-

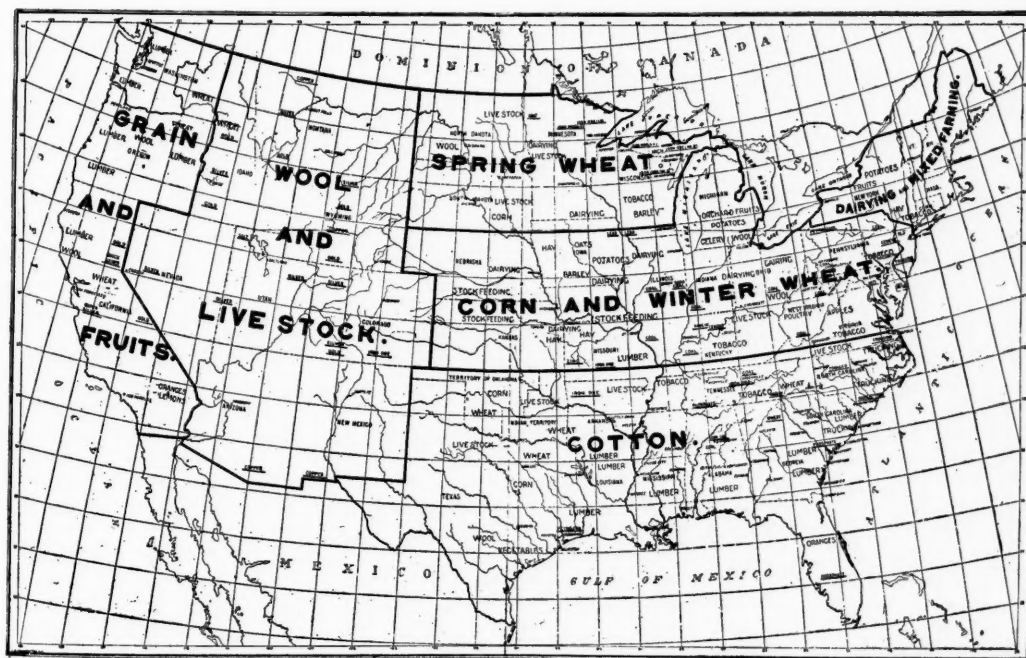
000 bushels; oats, 860,000,000 bushels; barley, 120,850,000 bushels; rye, 30,350,000 bushels. Thus a total of 4,351,851,000 bushels of cereals were produced on 841,000,000 acres, to say nothing of the farming land used for other crops and for pasture land, barnyards, etc. Prices obtained by the farmers for the cereals differ every year. Last year, for instance, there was a shortage in corn, and it sold for 60 cents a bushel on the farm. The history of corn has been that during such plentiful seasons as this one the average price is 30 cents per bushel. At that rate 1902 corn will bring to the farmers \$776,985,300. Wheat prices are governed accordingly. All other things considered, wheat will bring 60 cents to the farmer during 1902,—that is, he will have realized that amount by general consideration of wheat on hand, the shortage, etc., and at this figure the wheat crop will net \$580,100,000 to farmers. Oats, if sold at the present market price, will bring \$350,500,000; barley, \$52,750,000; rye, \$15,909,000, or a total of \$1,776,244,000 for cereals alone. The cotton crop is worth this year about \$500,000,000, while the hay, including alfalfa, is worth the same amount to the farmer. Potatoes will sell for \$100,000,000, while the buckwheat crop is valued at \$8,000,000. There have been other years when cereals sold for more; last year the corn crop, though

one-half as large as in 1902, sold for \$921,555,768. But the farmers did not hold much of it when it went to 65 cents, so they were not benefited. The selling price at harvest time can generally be accepted as the farm price.

THE PRODUCT COMPARED WITH THAT OF FORMER YEARS.

Approximately the earnings of the five and two-thirds million farms of the United States was, for 1902, five and one-fifth billion dollars. This is far in excess of the total income of the farmers at any other time in their history. The products of the farms for 1899 sold for \$4,739,118,752. The cereals, save corn, are about equal to the crop of 1899. This year, 500,000,000 bushels more corn and several hundred thousand head of steers in excess of three years ago were placed on the markets. And one should also remember that the number of farms is continuously increasing at a rate of from fifteen to forty thousand annually.

The corn crop of the world for 1900 was 2,882,900,000, the corn crop of the United States for 1901 was 1,522,518,000 bushels, while the corn crop of the United States for 1902 is slightly in excess of the 1900 crop of the entire world. This year 94,869,928 acres were planted in corn, principally in Illinois,



MAP SHOWING THE DISTRIBUTION OF CROPS IN THE UNITED STATES.

Iowa, Missouri, Kansas, and Nebraska. Illinois exports more corn than any other State, or 35,000,000 bushels in 1901. On March 1 of the present year much of the crop of 1901 was held and sold during the spring at 60 and 70 cents per bushel, excessive prices indeed. When the first corn was being gathered in the West the market price in Chicago was 67 to 70 cents.

The average yield per acre in 1901 was 16 bushels; this year, 30. The wholesale price of corn on December 1, 1901, was 72 cents, and in May it touched the high-water mark at 80. There was a corner in corn in July, but this did the farmers little good. Their bins were sold bare before that time.

THE WHEAT CROP.

The average yield of wheat, since a report has been kept, is 15 bushels per acre. In the Southwest, Turkey red wheat has been known to run 40 bushels per acre, and certain expert wheat growers have a system of drought-proof planting which yields 25 bushels. The greatest average of wheat for one State is reported from Washington, with 29 bushels per acre for 1901. Last year 375,000,000 bushels of wheat were exported, there being an overproduction of 200,000,000 bushels above the general average. Farmers in 1901 cleared \$205,000,000 on wheat alone. On July 1 of the present year the farmers held in their granaries 52,000,000 bushels of old wheat. The 1901 crop sold for \$467,350,156, as against \$580,100,000 for 1902. The shortage in bushels of wheat this year was more than accounted for in price. Several million acres of wheat were entirely frozen out during the winter, and this land was ploughed up and sown in corn. But the crop turned out much better at harvest than it was expected to do. Clear dry weather for three weeks prior to cutting time assisted the grains in development. The wheat crop of the world for 1900 was 2,873,000,000 bushels.

PRESENT STATUS OF THE FARMING INDUSTRY.

There are 10,438,922 persons engaged in agricultural pursuits, while all other industries engage 18,845,000 persons. One-third of the entire area of this country is devoted to tilling of the soil. There are to-day 5,739,657 farms in the United States, and the value of farm property, including improvements, stock and implements, is \$20,514,001,838. The number of farms has quadrupled in the past fifty years, while the value of the farming land to-day is five times as great as the selling price of fifty years ago. More than 1,000,000 farms have been laid out and fenced in by settlers, principally in the West, in the past ten years. Fifteen thousand farms were

given away by the Government during 1901. When the Indian Territory is opened for settlement, about 1904, 8,000,000 acres of fine farming land will be offered for sale at low prices, and farming will receive another valuable acquisition to its ranks. There are 306,000,000 acres of unsettled land in the United States ready for immediate occupancy.

The total acreage used for farming purposes is 841,000,000 acres,—an area which would contain England, Scotland, Ireland, Wales, France, Germany, Austria, Spain, Japan, and the Transvaal, leaving sufficient room for several smaller countries to go in around the edges. None of these countries, or all of them combined, would make a respectable showing with our agricultural products. The value of farm exports in 1901 was \$951,628,331.

THE FOREIGN MARKET.

The supply of farm products sold abroad is increasing every year. In 1900, according to the Secretary of Agriculture, the amount was \$950,000,000. For years there have been objections raised in the East by farmers against the reclaiming of the arid lands of the West. A reason was offered that the supply would exceed the demand. Experts scout this idea, and say that the new foreign markets being opened, principally in Asia, will absorb the surplus of farm products of the West, no matter how excessive over previous yields. One difficulty in raising farm products with profit on the Western slope is high transportation rates to the Eastern seaboard. James J. Hill, president of the Great Northern Railway, recently said of undeveloped trade in the Orient:

There are a thousand million people off our Pacific coast, with only three million farmers on the Pacific slope to reach out for their trade. To develop this trade national irrigation is necessary, and is the one thing needed to give the United States dominant power of the Pacific Ocean commerce and supremacy of the world's trade in farm supplies. Every business interest benefits by irrigation.

Thus it will be readily seen that the possibilities of farming in the United States have not half been accomplished. But public lands have been opened at a rapid rate since 1892, 112,294,681 acres having been disposed of by the United States, principally to farmer-settlers.

FARM LABOR.

While farming is yielding large profits to the owners, what of the farm workers? In 1900 there were 5,321,087 daily wage earners in the United States. Of this number 1,522,100 were regularly employed farm "hands," working by

the day or month, exclusive of farmers who own and operate their farms. The scale of wages paid them is from 80 cents to \$1.25 per day, or \$20 to \$25 per month and board. The wages for helpers, extra and regular, amounted to \$365,505,921, while the value of farm products was over \$4,700,000,000. The average expense for each farm, so far as the labor is concerned, was \$64 in 1899, while the average value of the products per acre was \$4.47. White farmers paid more for their help, on an average for each farm, principally because their farms were larger. Approximately each white farmer paid \$71 for his hired help throughout the year. Of course some of these farmers did not hire any help at all, harvesting their grain in midsummer alone. But, on the other hand, some of the "big" farmers of the corn and wheat belts paid out from \$100 to \$500 daily for helpers during the garnering seasons. It costs more to run sugar farms, \$1,985 being paid for each plantation of this kind which harvested a crop in 1899. In 1889, the price paid for the running of various cereal and produce farms is given by the Census Bureau as follows: per farm, wheat and grain farms, \$76; cotton, \$25; tobacco, \$51; nurseries, \$1,136; vegetable, \$106; dairy, \$105.

Besides the regular number of farm helpers,

about 100,000 are employed in addition during the wheat-cutting season in the grain belts. These are known as harvest hands, and are paid from \$1.50 to \$3.00 per day. These harvest hands are now forming themselves into unions for their own protection from overwork and low wages. Many labor unions for regular farm hands are being organized in Indiana, Ohio, Kansas, and the Southwest. The young man who has made his home on the farm year after year is paid less than any other class of workers. He has had longer hours and no vacations. He has brought to his employer larger returns for the work than the coal miner, the steel worker, or the mechanic of ordinary skill. The total expense, for instance, on an acre of wheat is \$6. Of this \$4.10 goes for horse hire, twine, seed, etc., while the remainder is paid to the two men who gather it and the one who ploughs the soil and sows the grain seeds. The profits upon their \$1.90 worth of labor yield from \$5 to \$8 to their employer. Corn is produced for \$5.85 per acre, of which \$2.25 goes to the man and his team. Generally the horses are owned by the farmer, and the man is getting \$20 per month. The duties and wages of the farm hand of to-day, it may be seen, are not commensurate with the profits of his employer.

THE DIFFUSION OF AGRICULTURAL PROSPERITY.

BY PROFESSOR HENRY C. ADAMS.

THE marked prosperity which has attended the industry of agriculture during the past few years has been the occasion of many comments respecting its industrial and social significance. In a general way, it is understood that all members of society are partakers of this prosperity. It is one thing, however, to concede in a general way the proposition that the commercial success of one class or interest must diffuse itself throughout the community; it is quite another thing to see clearly in what manner, and under what conditions, this diffusion takes place. Indeed, it is by no means easy to appreciate fully the extent of the mutual dependence of classes and interests in a country whose industrial organization is like that of the United States.

There was a time when the chief significance of agriculture lay in the fact that it provided

raw material and food for those engaged in manufacture and trade. This must, of course, ever remain an important service of agriculture, but it fails to suggest the chief significance of the prosperity of the farmers at the present time. Of greater relative importance is the fact that a series of successful years in the industry of farming increases the purchasing power of a vast body of intelligent men and women whose homes are scattered throughout the length and breadth of the land. It is through this increase in ability to buy goods that the prosperity of its rural districts makes itself felt, for this presents to the manufacturer a commercial motive to employ labor and capital in producing the goods which the farmers demand.

It is doubtless true that this relation of the agriculturist to the manufacturer is in a degree a

reciprocal relation. At whatever point one breaks into the circle of trade he may observe the current of exchanges to move in both directions. The manufacturer buys from the farmer as well as the farmer from the manufacturer. All permanent and healthful exchanges are at last analysis reducible to barter. But while this is true, it is also true that any series of activities must have a beginning, and both analysis and observation lead to the conclusion that the initial step in creating a circle of successful trade must be taken by those producers who, from the nature of their occupation, deal with the primal factors of consumption. The manufacturer will produce nothing unless he sees, or thinks he sees, a market for his goods, for neither he nor his laborers care to consume the things they make. The merchant and the transporter, also, await the appearance of a visible demand before expanding their enterprises. The farmer, on the other hand, will plant and reap whether there is a strong demand for his produce or not. The condition of the market may influence the kind of seed sown, but it will not, at least for a considerable number of years, influence the extent of the sowing. This is why, after a period of commercial depression, the manufacturers and the merchants are more anxious even than the farmers themselves for good harvests and good prices.

THE CONSUMER'S POINT OF VIEW.

In what way, then, does a bountiful harvest under propitious conditions of the market diffuse itself throughout the community? To answer in a sentence, this diffusion takes place through the agency of the motive which a prosperous condition of agriculture presents to the manufacturer and the merchant. The prosperity of agriculture is the center of that spontaneous activity which, when extended to the entire field of human wants, results in what is known as "prosperous times." Thus, a series of bountiful harvests is the starting point of recovery from commercial depression. Other facts there are, without doubt, that should be embraced in a complete explanation, but success in agriculture is the initial factor; it is the fundamental fact. We gain the correct point of view from which to analyze industrial interdependence when we consider it from the point of view of consumption.

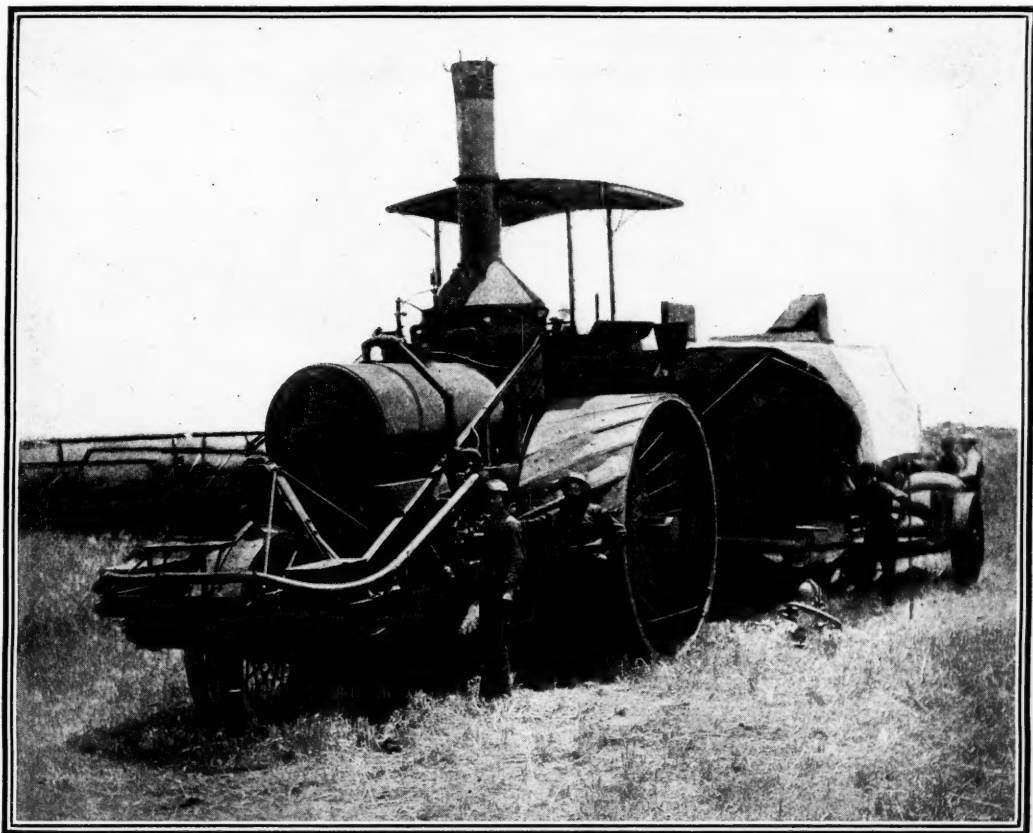
While it is true that the above analysis holds for all peoples and all countries, there are certain reasons why it bears a peculiar significance for

the United States. In the first place, notwithstanding the marvelous development of manufactures, this country is still an agricultural country. Success in agriculture touches the lives and interests of a large portion of the population. It means a rise in the scope and standard of demand of a very considerable number of people, and results in the strengthening of a home market of such proportions as to furnish, quite independently of foreign markets, an adequate motive for the development of manufacture and trade. From the point of view of consumption the significance of an industry is measured, not by the amount of capital invested, but by the number of consumers which it supports.

THE FARMER'S ECONOMIC STATUS.

The intelligence of the agricultural classes in this country, also, is a fact of equal importance, for widespread intelligence is essential to the elasticity of commercial demand. The American farmer does not hoard his cash. He does not, like the peasant of southern Germany, know the system of "blue stocking" banking. Prosperity for him means a rise in the standard of living, or an improvement in the equipment of production, either of which constitutes an effective demand for the labor of the non-agricultural classes. And, finally, it should be observed in this connection that the American farmer is, as a rule, his own landlord. This makes an immense difference in the extent to which agricultural prosperity is diffused throughout the community. Being his own landlord, he receives as a portion of his income the rent that accrues on his land. This not only puts at his disposal a larger sum of money to be expended, but it places the expenditure of this amount in the hands of a class whose demands are for a large quantity of common, ordinary goods. This of itself is a significant fact, for a moment's consideration makes it evident that an increase in the available wealth of a small aristocratic class must be followed by relatively slight industrial consequences as compared with the results of a diffusion of an equal amount among a large body of intelligent consumers. Thus, from every point of view, American agriculture is in a condition to control in large measure the industrial activity of the American people. The prosperity of the farmer, if not synonymous with the prosperity of the nation, is an essential for widespread industrial activity.





A GIANT AUTOMOBILE HARVESTER AT WORK.

AMONG the products of California wonderful for their bigness is a combined automobile harvester and thresher, now at work on the Pacific slope, doing its part toward garnering the great crops of 1902.

This "department store" harvester includes and is propelled by an automobile having a 30-horse-power engine. The reaper cuts a swath 36 feet wide; the barley heads are caught on a moving belt 48 inches wide, and carried to the threshing department of the machine. A half minute after the boss sings "all right," and the Juggernaut begins to move, grain comes pouring into the thresher's bin, not only shelled, but carefully cleaned. The grain is transferred immediately to sacks, which are sewed and removed from the machine as soon as twelve are filled.

This mighty product of American machine-

making is 66 feet long, weighs over 100 tons, and cuts and threshes under favorable conditions as much as 100 acres a day. Four horses are in constant use supplying it with fuel oil and boiler water. It defies hills of any reasonable grade, and travels at an average rate of three and a half miles an hour. The great wheels prominent in our picture have tires 4 feet wide, with ridges 1½ inches high.

These harvesters are made near Oakland, in California. Men that farm on a large scale come from neighboring States, and from as far east as Kansas, to see the machine at work. Three giants of the same type were made in California and sent to Russia for use on the great grain fields of the Steppes, but the train carrying them was seized by the Boxers and side-tracked for two years.

"FIXING" NITROGEN FROM THE ATMOSPHERE.

BY THOMAS COMMERFORD MARTIN.

EXHAUSTION of the world's supply of coal is being appreciably retarded by the electrical utilization of hitherto wasted water powers. At no distant date it may be further checked by the corresponding employment of the tides of the air and the sea. In like manner, there now emerges the possibility of maintaining indefinitely by electrical methods, for the enormous benefit of the progressive civilized races of the world, the supply of fertilizers necessary to insure steady and abundant food. Many readers of the *REVIEW OF REVIEWS* will remember the alarm caused in 1898 by the British Association address of Sir William Crookes, on the serious extent to which the world's wheat supply is threatened by the failing fertility of the available soil. A profound sensation was caused everywhere by that remarkable analysis of the situation. Strenuously controverted as his pessimistic assertions were, they remain broadly true; and may here be summed up in the statement that the world's low average of less than thirteen bushels per acre means literal starvation for the rapidly increasing nations of wheat eaters, unless by large access to cheap nitrogenous manures the quantity can be considerably bettered. The Caucasian has, indeed, consumed fertilizers even more extravagantly than coal and iron.

There are other ways than riotous living to waste one's substance. The nitrate deposits of Chile are swiftly running out. The guano islands are even now cleaned up. The phosphatic beds of the South are quite strictly limited. Normal resources are also squandered with criminal prodigality, and the unrequiting sea is residuary legatee of untold treasure from drains and dumps. In England alone fixed nitrogen worth \$80,000,000 a year is chucked away, while the whole Atlantic seaboard of the United States testifies vividly to every eye and nose of equal waste among ourselves.

A prediction has been made that barely thirty years hence the wheat required to feed the world will be 3,260,000,000 bushels annually, and that to raise this about 12,000,000 tons of nitrate of soda yearly for the area under cultivation will be needed over and above the 1,250,000 tons now used up by mankind. But the nitrates now in sight and available are estimated good for only another fifty years, even at the present low rate of consumption. Hence, even if famine

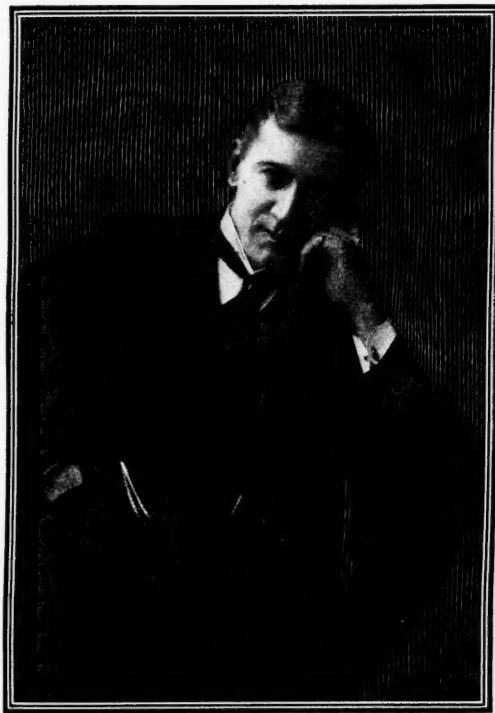
does not immediately impend, the food problem is far more serious than is generally supposed. The starvation that we assume to be periodically inevitable in such regions as India and Russia, and which is not remote in the history of occidental Europe, looms again on the near horizon of the present century, unless we take to sundry husks that the swine do eat. Perchance, the declining increase of population shown by all recent census returns may stave off that grimly evil day. More probably, as this article will point out, relief may come from the application of new ideas and new forces to new ways of winning food. The benefactors of the race who can get three bushels of wheat where one grew before see their golden opportunity.

Dealing with the conditions as they are, Sir William Crookes pointed to an inexhaustible supply of nitrogen to be dug from the air by industry and ingenuity, with the aid of cheap power in illimitable supply, as at Niagara; and curiously enough, his prophetic surmise is already in actual realization. On every square yard of the earth's surface nitrogen gas, in the air, bears down with a weight of seven tons. What has been demanded is a method that will extract or "fix" this at little cost, and expeditiously, just as it is fixed otherwise by the infinitely minute and slow processes of nature. A building the size of the Carnegie Music Hall, in New York City, holds thus about twenty-seven tons of nitrogen, and if that were taken out of the air, and combined in the form of nitrate of soda, it would be worth \$10,000.

Following up such calculations, Sir William Crookes has estimated that, with the electrical energy of Niagara to burn up the air, nitrate of soda ought to be producible at not more than \$25 per ton. This compares, for example, with Chilean nitrate at \$37.50 per ton, or the nitric acid of commerce at \$80 per ton. Now the greater the consumption of Chilean nitrates or Carolina phosphates the higher the price is driven; whereas, the larger the scale upon which the energy of Niagara is utilized, the cheaper the output of any plant there. The supply of air will be granted to be inexhaustible, and the available energy of Niagara is put at from five to ten million horse power; so that at the spillway of the Great Lakes alone the inventor lays his hand upon all the raw material required for furnishing

under favorable conditions whatever nitrates can possibly be needed, whether for the crops of the world or for various other important uses.

In short, with the aid of electrical-conversion apparatus, there is nothing that Niagara will fail to give us, from manure to diamonds, for just as the carbon crystals have been fixed in the fierce heat of electric furnaces, so now Mr.



MR. CHARLES S. BRADLEY.

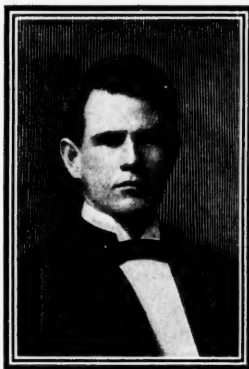
Bradley and his associates have fixed nitrogen by a similar combination of forces. As far back as 1785, the famous Dr. Priestly noted the fact that when an electric spark was discharged through it, the air underwent immediately a chemical change. A thunderstorm and the following freshness are an analogue to this. Any one who has stood in the vicinity of frictional electric machines at work has become conscious of the pungent, fresh odor they caused; and the same phenomenon is often noticeable where dynamo-electric machinery is in motion, if the brushes on the commutator spark freely. This smell has been attributed to ozone created by the decomposition of the air and the rearrangement of the oxygen atoms; but it is now thought that it may be due, for the most part, to oxides of nitrogen. In regard to the 1785 experiments, the celebrated

physicist Cavendish said, in the quaint phraseology of the time: "We may safely conclude that the phlogisticated air—nitrogen—was enabled by means of the electric spark to unite to, and form, a chemical combination with the dephlogisticated air—oxygen—and was thereby reduced to nitrous acid; for in these experiments the two airs actually disappeared, and nitrous acid was actually found in this room."

It was, indeed, by following analogous methods that Lord Rayleigh, not long ago, was able to segregate "argon," that hitherto undetected constituent of the atmosphere. With an alternating current arc, he could effect the union of about 29 grammes of oxygen and hydrogen at the expenditure of one horse power. Nitrogen, as is well known, is present in the air in the proportion of about eight volumes to two of oxygen.

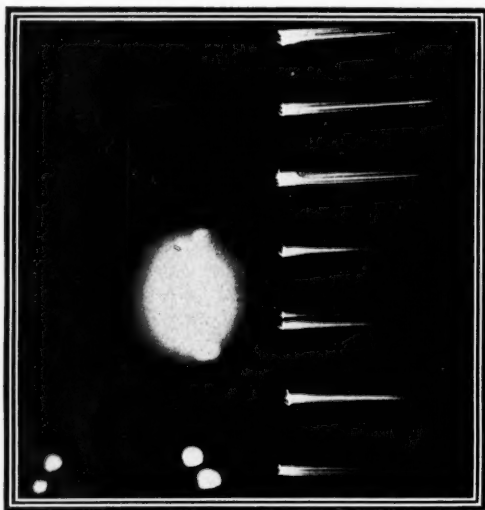
Here, then, are the foundation data of a new art; but, as usual, it is a long road from the crude experiment of the philosopher and the vivid dream of the visionary to the evolution of a practical process yielding definite commercial results. We need not wonder that over a hundred years have elapsed between the first observation and the new industrial enterprise founded at Niagara Falls by Mr. Charles S. Bradley and his fellow-worker, Mr. D. R. Lovejoy. There are even now enough philosophical records of unexploited phenomena heaped up to keep all the inventors worth their salt busy all the century

founding new arts and industries on them. The problem before Messrs. Bradley and Lovejoy has consisted mainly in the production of a large number of electric arcs or flames in a confined space, through which a regulated amount of air to be burned could be passed continuously; this air emerging from the apparatus laden with nitric oxides and peroxides, as the result of the combustion, and ready for treatment and collection. It is almost needless, of course, to add that incidentally they had to attack a number of other difficulties demanding inventive ability of the highest order.



MR. D. R. LOVEJOY.

A great deal of time and money had to be spent in determining the form or variety of electric arc-spark that would effect the maximum chemical union of nitrogen and oxygen in the



EIGHT-INCH 10,000-VOLT ARCS BURNING THE AIR.

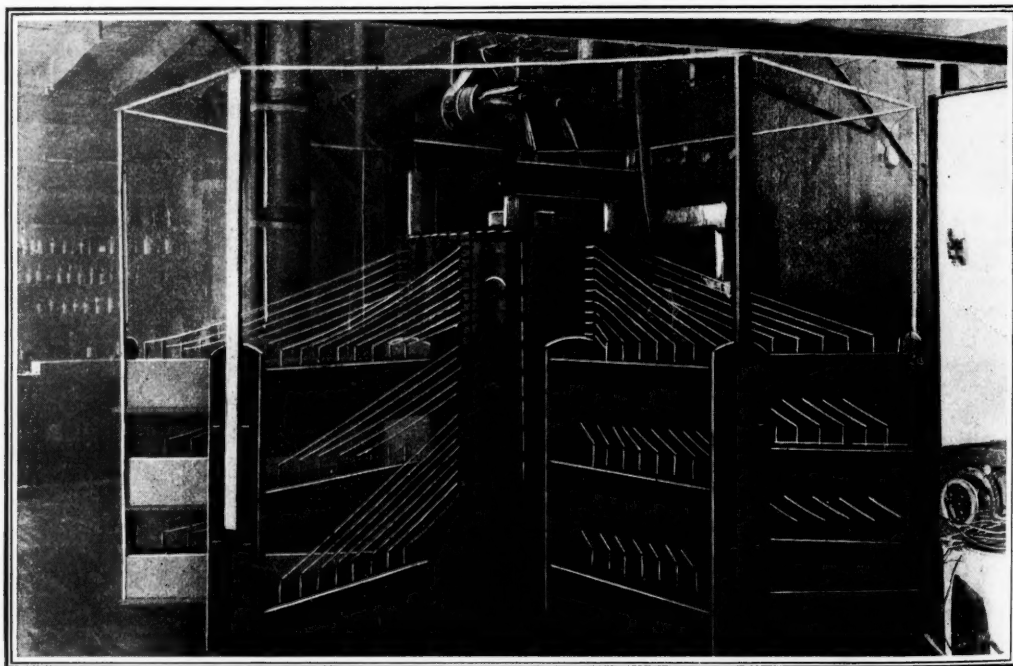
air. The curious discovery was early made that "static" sparks, such as are caused by the rotation of the frictional glass disc machines seen in medical establishments, are not worth much for this work. In other words, of homely truth and wider range, the process was one needing lots of energy

back of it to do hard work, and not mere pyrotechnics; and static electricity has never yet been of any use to man as a beast of burden.

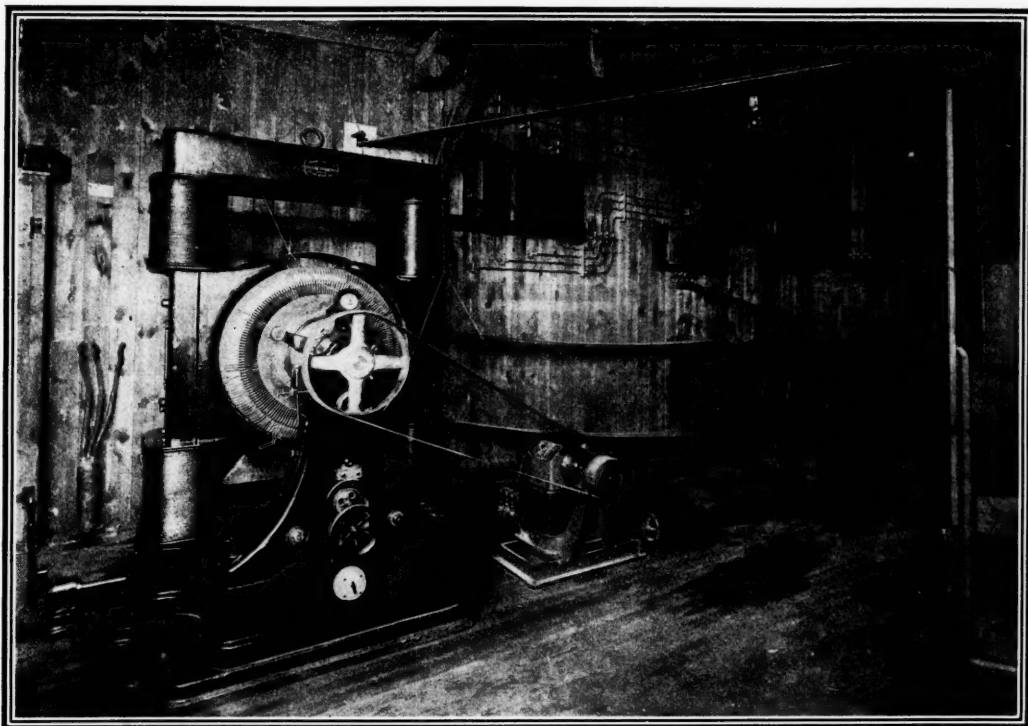
Turning, therefore, to kinetic or dynamic electricity as obtained from modern generators driven either by steam engines or by water wheels, the two inventors next ascertained that for their work, contrary to the experience of Lord Rayleigh, an alternating current arc was inferior to the direct current arc,—the latter being very much of the kind to be seen on the streets nightly in hundreds of thousands of lamps, whose arc is apparently a shining white bow of light between the two carbon sticks inside the globe.

Up to the present time, an arc-light direct-current dynamo of special winding has, therefore, been used by Mr. Bradley, giving current at the high pressure of 10,000 volts, which is far above anything ever used before in this country, although some direct-current power-transmission has been done recently in Switzerland with machines of 25,000 volts, the strain on the insulation of the machines being very severe.

Supply of current being now obtained from dynamo machinery, the power to operate which comes from Niagara, Mr. Bradley leads it into the nitrifying chamber, where the arcs are to accomplish in an instant results on which it is the custom of Nature to expend long centuries. In



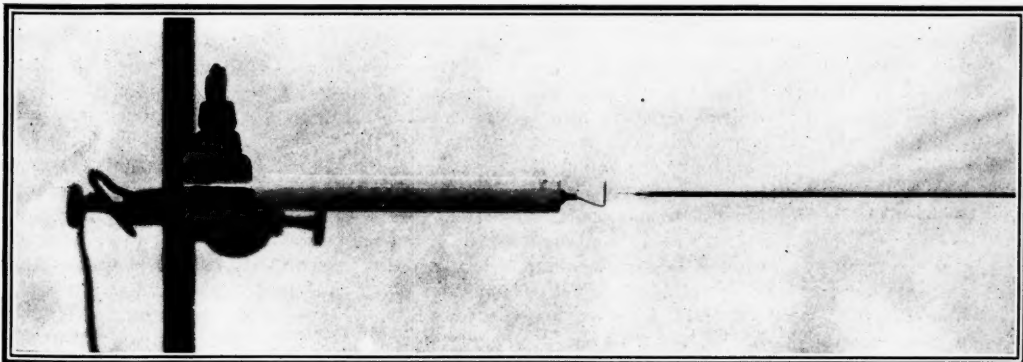
COMPLETE NITRIFYING CHAMBER AND INCIDENTAL APPARATUS FOR BURNING THE AIR WITH ELECTRIC ARCS.



GENERAL VIEW OF ARC MACHINE ON LEFT DRIVEN BY MOTOR AT THE RIGHT, RECEIVING ITS CURRENT FROM NIAGARA POWER PLANT.

the engravings herewith this chamber is shown separately and in assemblage with other parts of the apparatus. It consists essentially of a big box of metal 6 feet high and 3 feet in diameter. Inside is a revolving cylinder, or hollow shaft. The box has openings to admit the air and circulate it, and around its wall are rows of fixed electrical contacts for arcing points, arranged in six rows

of twenty-three each. The positive pole of the dynamo is connected in "multiple" derivation to these by wires, so as to include an inductance coil in each circuit, whose object it is to prevent the arcs from "short circuiting," and burning out, the dynamo. The negative pole or side of the dynamo circuit is connected with the revolving member inside the chamber, said cylinder



VIEW SHOWING TERMINALS USED FOR ARCING AND BURNING THE AIR IN CHAMBER.

having contact projections, or wire fingers, corresponding to the contacts on the shell of the box, so that as it spins around, the currents from the 10,000 volt dynamo arcs cross, as shown, in the air between the stationary contact points and the revolving ones. The arcs are thus rapidly and incessantly made, "broken," and remade within the chamber. A motor at the top of the apparatus drives the cylinder at a speed of from 300 to 500 revolutions per minute, while air is forced into the chamber at the rate of five cubic feet per arc contact per hour. The air leaves the chamber after this treatment laden with $2\frac{1}{2}$ per cent. of oxides of nitrogen. The wires on the hedgehog barrel in the chamber are tipped with platinum, to minimize wearing down in the intense flame of the arc. They are so set, each a little in advance of the other, as to form spirals from top to bottom of the shaft, enabling the arcs to work on the chambered air without cessation.

If the reader will think of the wire teeth of a music-box drum, and see a spurt of white flame passing every time a tooth is touched by the finger that sets up vibration, he will have a pretty clear idea of the electric arcing that goes on in the nitrifying chamber. The arcs which thus wind spirally around the shaft are themselves six or eight inches long,—thin, white resistless darts of all-consuming flame. This is a very long arc, those in lamps being usually but half an inch. In front of each line of arcing points is an air pocket, at the bottom of the chamber, to catch the decomposed air. Thence pipes lead away which entrain the air and its gases to an absorption tower, where the process is completed.

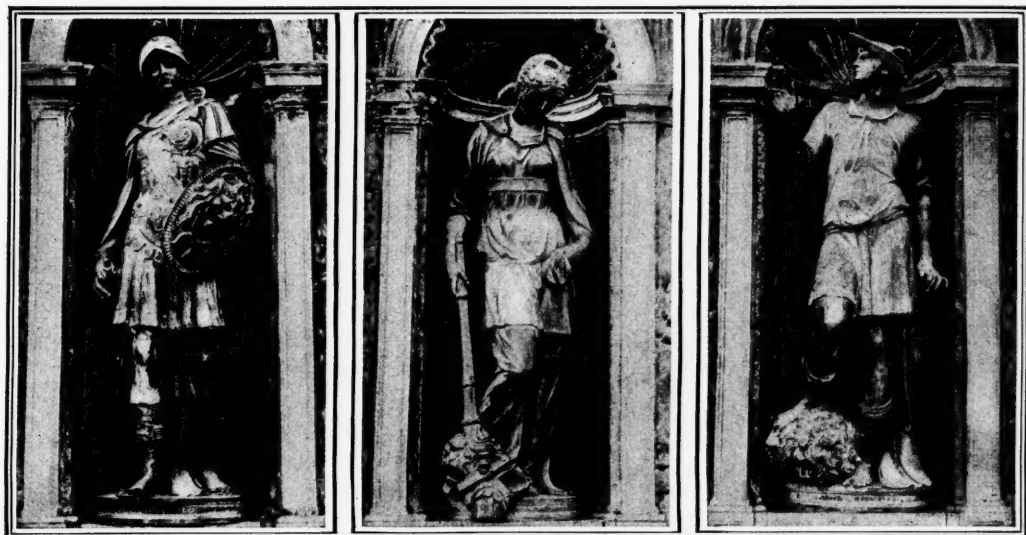
The absorption or water-sprinkling tower used is of the ordinary kind common to chemical processes, and the result of this treatment is nitric and nitrous acid. If the gases are brought into contact with caustic potash, we get saltpeter; if the base is caustic soda, we get nitrate of soda. Professor Chandler, the distinguished chemist, of Columbia University, New York, in a careful investigation of the process made recently, found that with current at Niagara costing \$20 per kilowatt,—i.e., $1\frac{1}{3}$ horse power per year,—the expense for the energy required would be a little less than 1.6 cents per pound of 70 per cent. nitric acid, which is the customary commercial strength of acid selling at 5 cents per pound.

It is hardly to be wondered at that Lord Kelvin, when in this country last April, should say, after witnessing the operation of this initial plant at Niagara Falls: "I saw something there that I have never seen before; in fact, I regard it as the most interesting sight I have witnessed in America on my present trip." It was Emerson's advice to hitch our farm-wagons to a star, but

here are men who use the atmosphere as their milch cow. The tremendous effects possible in agriculture have been suggested above. By way of confirmation, let it be noted that on their experimental field at Rothamstead, in England, Sir John Lawes and Sir Henry Gilbert, with the aid of nitrate of soda, raised the yield of wheat from less than 12 bushels per acre to over 36. On the experimental Briarcliff Farm in New York State, last year, similar experiments, conducted under Prof. George T. Powell, showed that with an investment of \$2.62 in nitrate of soda the hay crop per acre, worth \$15.30, was raised to \$28.80. As an offset to lean pasturage and slovenly tillage, nitrate of soda has obvious merits.

Nor is this all. While in agriculture saltpeter deserves all hail as blessed, in warfare it is known as "villainous;" and without a plentiful supply of it modern warfare would certainly soon come to an end. The bow and spear would again reign supreme, as in the ancient world. Your modern battleship and your siege artillery, wasting the fee simple of a fine farm at every murderous whiff, would lie inert, like obsolete mastodons, without the nitric food that electrochemical art must now furnish to them. Nitro glycerine, gun cotton, dynamite, a whole vocabulary of smokeless powders and direful explosives, depend on the same raw material for their ability to convert granite into a fourth dimension. But nitric acid is equally important to the celluloid industry, and photography owes much to nitrate of silver.

Here surely is a field in which the imagination of the artist or economist, not less than the skill of the inventor, can find free play. Indeed, a startling story has already been written exhibiting the universe in flames, as a result of such irreverent handling of the atmosphere, but as far back as 1892, Sir W. Crookes, before the Royal Society, showed that while nitrogen is a combustible gas, the reason why its flame does not spread through the atmosphere, and deluge us in a Noachic flood of nitric acid, is that its ignition point is higher than the temperature of its flame. It is not hot enough, therefore, to set fire to the adjacent mixture of gases around it that we call air. On the contrary, enough has been said above, it is believed, to demonstrate that rather than cosmic disasters from this profoundly interesting and highly original work, we may confidently expect newer benefactions yet unforeseen. Mr. Bradley was already known in the electrical domain as a tireless and creative engineer, but by his latest efforts, which only a bold, undaunted genius would put forth, he has placed himself in line with men whose actions affect the well-being of the human race.



Minerva.

Peace.

Mercury.

THREE OF THE BRONZE STATUES DESTROYED BY THE FALL OF THE CAMPANILE IN VENICE.

COLLAPSE OF A GREAT HISTORICAL MONUMENT.

FOR many centuries the great bell-tower of the Cathedral of St. Mark's, in Venice, has been one of the famous monuments of Europe. Begun in A.D. 902, it stood 323 feet in height, and weighed no less than 20,000 tons. From its lofty summit the bells of St. Mark's have scattered their melody for a thousand years over the beautiful city. The Campanile was as a guardian angel, singing an ever-renewed song of glory and of praise in the ears of the Bride of the Adriatic. But for ten years past the existence of the Campanile had been known to be in danger. A veteran architect had been dinning into the ears of the authorities Cassandra-like warnings as to the coming destruction of the tower. There are none so deaf as those who will not hear, and his warnings passed unheeded. He then redoubled his outcry, and was exiled for his pains. Returning from exile, he once more renewed his lamentation over the coming doom of one of the greatest of the architectural glories of Italy. A few workmen were employed repointing the walls here and there, but it was mere tinkering at the outside. Then the inevitable happened. On the morning of July 13 cracks began to appear in the Campanile, visible even from the Piazza. The architect redoubled his warnings, and claimed that the Campanile had not twenty-four hours to live.

It seemed almost incredible that, with such prophecies in their ears and such fissures before their eyes, the people of Venice should have contemplated with comparative equanimity the fate of their Campanile. Even if they had not cared for the tower, they might surely have dreaded the havoc that seemed inevitable if 20,000 tons of masonry suddenly collapsed and fell by the side of the crowded Piazza between the Cathedral and the Palace, which are the pride and glory of Venice. They seem, however, to have taken the matter very nonchalantly. On Monday morning, July 14, the sun rose for the last time upon the old Campanile, lighting up with its own glory the golden angel on the tower.

At 9 o'clock, according to the story of an American architect who witnessed the fall of the tower from the neighborhood of the Rialto, he saw the golden angel slowly sink directly downward behind a line of roofs, and a dense gray dust arose in clouds. Instantly, from all parts of the city, a crowd rushed toward the Piazza, to find on their arrival that nothing was left of all that splendid nave but a mound of white dust, 80 feet high, spreading to the walls of St. Mark's. His daughter, little Katharine, had gone off to the square, with her horns of corn, to feed the pigeons. The child said:



THE CAMPANILE AND THE PIAZZA.

Everything was quiet; two men were putting up ladders in the tower, when suddenly people began to cry out from under the arches (it was warm sun and the Piazza was empty), little puffs of white flew out at the height of the first windows, great cracks started at the base and opened "like the roots of a tree," a fountain of bricks began to fall all around the walls, and she says as she looked she saw the golden angel, upright and shining, slowly descending a full third of the height of the tower, when a great white cloud enveloped it.

The Campanile had suffered the natural dissolution of extreme old age. It died almost without a sound, and in its death, miraculous though it may seem, it did not kill or wound a single living thing. On the surrounding buildings hardly any damage was done. The great treasures of art which were stored in the immediate neighborhood escaped without injury, and the golden angel, instead of being dashed to pieces, was found almost intact directly within the semicircle of the central doorway of the Cathedral. The

angel, say the Venetians, has flown home. It is to be placed upon the high altar with great pomp and ceremony in token of the miracle. The accompanying photographs show the Campanile as it was and the Piazza as it appeared immediately after the fall of the tower. The Italians spend but little money over the preservation of their monuments; they have received them as an inheritance from their ancestors, and consider that they are an eternal possession. This sudden reminder that everything but a pyramid crumbles beneath the touch of time has spurred the Italian Government and people into spasmodic activity, which may have good results in the preservation of many monuments which are now crumbling into ruin. The

Campanile is to be rebuilt. The statement that an American-Italian had subscribed \$100,000 toward its restoration is unfortunately contradicted. That sum has been voted, however, by the municipality of Venice, and it is estimated that it will cost \$600,000 to restore the tower. The new Campanile will be, of course, as nearly as possible an exact replica of the old.



THE RUINED CAMPANILE, SHOWING ST. MARK'S CATHEDRAL.

LEADING ARTICLES OF THE MONTH.

ATTORNEY-GENERAL KNOX, LAWYER.

PRESIDENT ROOSEVELT is besieged by the anti-trust interests, that want the trusts wiped out, and the trust interests, that want things let alone. There are laws on the books dealing with the trust question, and so far as the administration is going to deal with the trust question next winter the man of the day is the Attorney-General of the United States.

Mr. L. A. Coolidge takes the ground in the September *McClure's* that the trust question, as it confronts us just now, is a question of law, and is in the hands of Attorney-General Knox. He proceeds to inquire into Mr. Knox's capabilities as a lawyer.

THE ATTORNEY GENERAL'S CAREER AS CORPORATION LAWYER.

"He is a dapper bit of a man, a tiny figure charged with life, quick-stepping, alert and nervous, with a smooth-shaven, clean-cut face, boyish except for lines of strength and the denuded forehead soaring high above the eyes. Certain Wall Street magnates in their wrath have called him a country lawyer. The description hardly fits. He hails from Pittsburg, the very home of concentrated wealth, about the last place one would look for a countryman to attack capital in pure wantonness. But he isn't afraid of Wall Street.

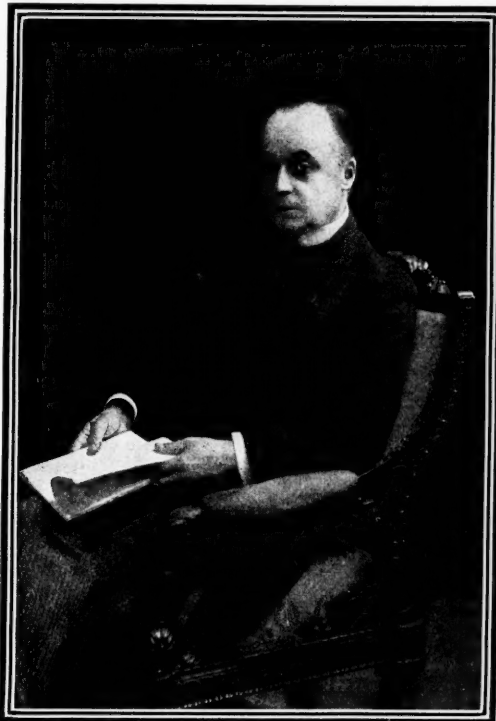
"For twenty years he was one of the most successful corporation lawyers in the United States. His personal retainers amounted to \$90,000 a year. When President McKinley asked him to become Attorney-General in 1897, he declined because he couldn't afford to exchange a professional income of \$150,000 for a salary of \$8,000 and a carriage. When the offer was renewed four years later, he was better able to make the sacrifice, and he was financially free and independent. He accepted. Then the labor organizations opposed his confirmation, because they thought he was the tool of trusts. But he isn't afraid of labor unions.

A SAMPLE OF HIS LEGAL WORK.

"It was his suggestion to President Roosevelt to bring suit against the Northern Securities Company and to institute proceedings against the beef packers. He believed that these corporations were violating the federal statutes, and he believed it to be his business, as attorney for the Government, to enforce its laws and test them.

With him it is a cold, clear, legal proposition. There is no politics in it.

"He is not likely to be mistaken. Eight or ten years ago some Pittsburg capitalists bought the street railways of Indianapolis. A rival company claimed that under the law the fran-



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HON. PHILANDER C. KNOX.

chise was about to expire; they had laid the wires to secure a renewal of the franchise for themselves. The Pittsburg men went to Benjamin Harrison, just then retired from the Presidency. He gave it as his opinion that the franchise was about to expire. They turned to Knox. He told them the franchise still had a long time to run. The question involved millions, and they submitted the case to Judge Dillon, of New York. Dillon's opinion concurred with Harrison's. Then they laid both Dillon's opinion and Knox's before Harrison, and Harrison, after studying them, came to the conclusion that he and Dillon were wrong and Knox was right. Suit was brought in a United States court. The Pittsburg men

had already retained Harrison. They asked Knox to join him. Knox refused. They insisted. He said, 'I will on two conditions: First, you must draw me a check now for \$10,000; second, you must draw me another check for \$100,000 if we win the case.' He supposed that would end it. But they complied with both demands. The trial came. Harrison addressed the court for four hours. The other side occupied eight hours. Knox spoke forty-five minutes. The court's decision followed point by point the line of Knox's argument."

AMERICA SUCCEEDS CARNEGIE AS HIS CLIENT.

"Knox was Carnegie's attorney during the Homestead riots in 1892. His ingenuity steered the ironmaster through the perilous legal complications of those days. Some of his suggestions were bold. It was he to whom it first occurred that the riotous strikers were open to the charge of treason for violent resistance to the laws of the State. He was acting then as a lawyer, faithful to the corporation which he served. In bringing suit against the trusts he believes he serves with equal faithfulness his only remaining client—the Government of the United States.

"For Knox is a lawyer all through. He has all a lawyer's intuitions and instincts. To-day he is the attorney for the Government, just as for years he was the attorney for wealthy private corporations,—with this difference, that when he served corporations he had many clients. After he entered the service of the United States he regarded his salary as an exclusive retainer."

WIRELESS TELEGRAPHY.

PERHAPS the first authority on telegraphy in Great Britain is Sir William H. Preece. This eminent engineer gives a full account of his relations with Mr. Marconi in the August number of *Page's Magazine*, the new British engineering journal. He describes the progress which has been made in wireless telegraphy, and gives his opinion as to the best use that can be made of the new system. In 1894, two years before Sir William Preece met Mr. Marconi, the former read a paper before the Society of Arts on electrical signalling without wires. In this paper he reported: "We have not acquired a practical system of signalling across space without the necessity of using wires." This phrase, he explains, is not quite correct. The word "wireless" is an absolute misnomer. Wires are essential and imperative in some part of the plan. Every telegraph of every kind requires a transmitter to generate electric disturbances, a medium for the transmission, and a receiver to translate

them into comprehensible language. The medium may be either metal, as in the ordinary telegraph wire, pneumatic, aquatic, or etheric. Through metals in water the disturbances are transmitted as electric currents; through the air and the ether as waves. The inventor of the Morse alphabet telegraphed across the Susquehanna River without submerging any wire. Lindsay did the same thing across the Tay in 1854, and Sir William Preece assisted him in testing his plan in London in the summer. In 1882, Sir William Preece succeeded in bridging the Solent on Lindsay's plan. He says: "It is to this day a common practice in India to maintain permanent telegraphic communication across rivers by similar means. Water is thus the medium completing the circuit. The wireless portion is a very small fraction of the whole conducting path of circuit." The circuit conveys currents of electricity, and the underlying principle is that of conduction, by which a telegraph wire containing a current of electric disturbance will have telegraph wires in its neighborhood.

THE PRACTICAL STAGE NOT YET REACHED.

In 1884, an old telegraphist in the Telephone Company's Exchange was able to read telegrams that were being sent on the post-office system. This led Sir William Preece to the conception of etheric telegraphy by induction. Effects were detected between wires separated by a distance of forty miles, and distinct conversation was held by telephone through a distance of one-quarter of a mile. The subject was brought before the British Association in 1886. In 1892, messages were transmitted three miles across the British Channel. In 1894, speech was transmitted across Loch Ness, one mile and a quarter, by telephone. In 1895, communication was maintained in the Island of Mull during the breakdown of the cable. In 1896, Mr. Marconi was introduced to him, "and showed me another and better mode of doing the same thing by the aid of the Hertzian electric waves." The resources of the post office were placed at his disposal for experiment and trial. The Hertzian wave method was so successful that Sir William Preece was able to create a sensation by announcing the results attained on Salisbury Plain at the British Association meeting in September, 1896. "Unfortunately," says Sir William, "Mr. Marconi was captured by a financial syndicate, and his relations with the post office were severed. Nearly six years have elapsed, and the system has not yet reached the practical stage. At the present moment there is not a single practical commercial circuit established on this system in the world." Mr. Marconi is ambitious of conquering great distances, but what

is wanted is not communication across great oceans, but across narrow rocky channels and between tide-swept island homes. The system does not work well on land; it was a failure in South Africa; the sea is its home.

The Germans seem nearer practical success than

series of etheric waves, and blind to all others. We can even tune the eye to receive only one color. The ear hears all air vibrations between thirty-two and five thousand per second, and is deaf to all others, and it can also be tuned to hear one note."

VALUE OF ETHERIC TELEGRAPHY.

As to the commercial value of wireless telegraphy Sir William Preece is very emphatic. He says:

"The value of the submarine cable system has not been shaken one iota. The Atlantic is bridged by fourteen cables, always available and rarely disturbed. Each works at a speed far exceeding anything obtainable on an etheric circuit."

In practice he does not anticipate that etheric telegraphy will ever be able to transmit more than ten words a minute, as the speed of working is limited by the number of sparks, which are very capricious, and require much humoring. Nevertheless, it is invaluable for nautical purposes. It tends to render the navigation of the great deep safer; it places ships in communication with each other when in danger or distress; it prevents collision in fog or at night; it allays the anxiety of the passenger, and it gives confidence to the sailor.

THOMAS A. EDISON AT HOME.

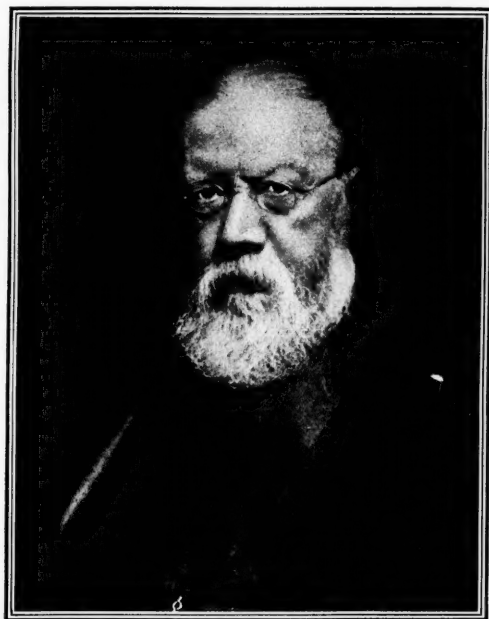
"THE Unknown Edison" is the title of some pleasant stories of the great inventor, contributed by Mr. W. B. Northrop to the September *Success*. As late as ten years ago Mr. Edison was still an undomesticated man, who seemed to find his only happiness in assiduous work. Of late years, however, he has indulged in more and more relaxation from his toil.

The present Mrs. Edison, a second wife, is the daughter of John Miller, who invented the famous Miller mowing machine, and she herself has decided mechanical ability of the creative sort. She and her husband are about to patent a new device together. She takes a great interest in all of his work, and has acquired through her association with him a great amount of electrical and mechanical knowledge.

THE INVENTOR'S ABSORPTION IN WORK.

"An amusing story is told of the great inventor's first marriage. Shortly after the ceremony, he was called away to his laboratory on an important experiment. He plunged into the work. At midnight, one of his friends called to see him. He had just accomplished the object of his labors, and was preparing to quit work.

"I guess I'd better go home," he said, as he

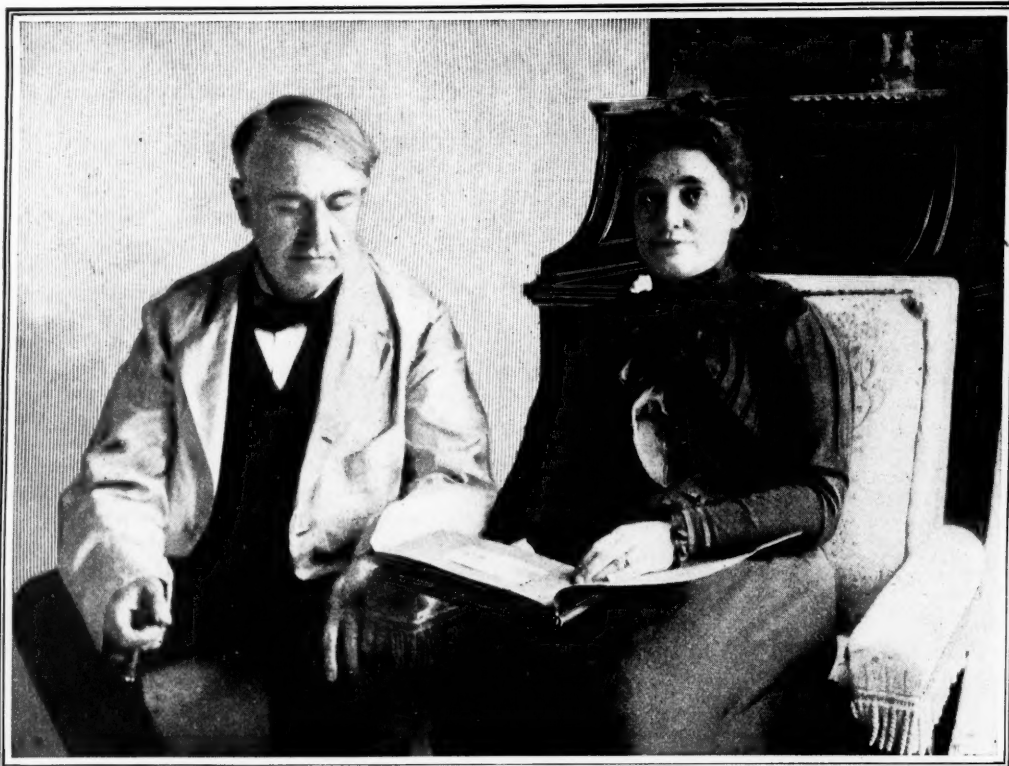


SIR WILLIAM H. PRECEE.

the Marconi Company is in England; they use the Slaby-Arco system.

The principal source of foreign disturbances is atmospheric electricity and lightning. When a thunderstorm bursts it telegraphs letters of the alphabet, especially "e," "i," and "s." At the same time it breaks up the conventional signals of the Morse alphabet into an undecipherable language. There are terrestrial effects also, which produce disturbing elements in the ether. On a telephone, in the stillness of the night, sounds are often heard like loud whistles, sharp pistol shots, the screeches of sea-fowl, and the cries of babies. These are due to stray waves which are at present fatal to reliable etheric telegraphy. A foreign ship communicating with a consort so affected the electric-light circuit of a British ship eight hundred yards away that every signal could be read by the blinking of the light of one particular electric lamp. It is possible, however, he thinks, to tune ships to one series or note of electric waves, so that they may be quite oblivious to all others. He says:

"The eye is an electric organ, tuned to one



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MR. AND MRS. THOMAS A. EDISON.

hurried into his coat, and jammed his hat down on his head; 'you know, I was married to-day.'

"The days of complete absorption in work have passed for him. His home-life has become necessary to him. Though he has had one or two relapses of 'working fever,'—when he steadfastly refused to be moved from the laboratory by Mrs. Edison's persuasions,—he has reached the period where he is glad to go to his home. Much honor is due to the woman who has wrought so marvelous a change in her husband. Those who knew Mr. Edison best predicted that his present wife would soon become a secondary consideration in his life. They are, from all accounts, mistaken."

THE CHILDREN HAVE TALENT, TOO.

Even little Theodore Edison, three years old, is said to have a strong propensity to experiment with the wonders of his father's laboratory. Charlie, eleven years old, is Thomas Edison's idol.

"One day he said to his father: 'May I have that old car that stands in the yard?'

"'Yes; if you will take it away and get it up to the house,' said the father, with a smile. He

evidently thought that such a proposition would daunt the youthful experimenter. The Edison home is about seven hundred feet from the laboratory, and stands upon a hillside, the grades of which are very steep.

"The next day he appeared at the laboratory with an old white horse, a lot of rollers, and another boy to act as his assistant. He borrowed from the laboratory some jack screws, and began to raise the car from its short strip of track. His father saw the initial stages of the performance, and wondered. He thought that Charlie might move the car across the level road in front of the laboratory, but expected him to give up when he should reach the steep hill. The lad went to work in a masterly fashion, got his car on its rollers, and moved it across the road. By work-carefully for several days, moving the car a little at a time, and keeping it blocked so that it could not roll back down the hill, the boy gradually got the cumbersome vehicle, with its trucks and everything else intact, and without even a broken window, to the lawn in front of the Edison house.

"But this did not satisfy him. He built a

track for the car, and, before many weeks, had a successful single-car railroad in operation. He and his boy companions experimented to their hearts' content, and the railroad was kept in efficient working order until every experiment known to Charlie Edison had been tried. This exhibition pleased the senior Edison greatly.

THE EDISON HOME AT LLEWELYN PARK.

"The Edison home is one of the finest residences in New Jersey, and is furnished with all the conveniences and luxuries of a modern palace. It bears evidence of Mrs. Edison's true taste and skillful management. The lower floor of the house is laid out in parlors, conservatories, and a magnificent dining room. Ponderous chandeliers, bristling with electric-light bulbs, hang from ceilings finished in open-work beams, exhibiting the best art of the builder. Mr. Edison has a fine library in his residence, though it does not contain so many scientific works as the library at his laboratory.

"The upper floors are given up to sleeping rooms and a special 'den' for Mr. Edison. There he works out his plans, and has at hand the reference books he desires in chemistry, physics, heat, light, and electricity.

"He is an early riser, and is ready for work at half past six o'clock. His first daily occupation is to read the newspapers. He is anxious to know if the reporters who interviewed him wrote just what he said, for he dislikes, above all else, newspaper interviews that are not correct. He does not like to be misquoted, and is willing to go to any amount of trouble in order that his statements shall be reported without errors. No matter how busily he may be engaged at the laboratory, he will stop to look over an interview, and no one is more willing than he to set a reporter right."

A WORD TO INVENTORS.

THE rôle of the inventor has always been a somewhat pitiable one, and it must be admitted that for one inventor who succeeds there are at least a thousand who fail utterly to realize their dreams of fame and fortune.

In the *Nouvelle Revue*, M. Desmarest traces the good and ill fortune which has attended some of those whom the world has reason to regard as among its greatest benefactors. He points out with considerable shrewdness that the invention which is successful, and which brings its inventor a large fortune, is generally some apparently insignificant little object, which has been elaborated without very much thought or time. The man who invented or rediscovered the safety-pin

made millions of dollars, as did the inventor of the steel pen.

TOYS THAT MAKE FORTUNES.

The inventor of a really good new toy is always sure to make a considerable sum of money, and a large fortune falls to the lot of him who can think of some really practical and sensible addition to an article already much in use. Fortune and fame attended the efforts of the man who first imagined the placing of a small piece of india rubber on a pencil shield. As was meet and right, a woman invented the baby carriage, and she is said to have made about \$50,000.

The French writer gives innumerable examples of those inventors who have benefited humanity, but who have not been very fortunate themselves. The question of patents is in every country a difficult one, and as most inventors are unbusinesslike, a good idea is often exploited by a man, or group of men, who would be quite incapable of making the actual invention. Large fortunes have been made by those who have simply adapted an already existing invention to the practical needs of humanity. There are still many things for which the world anxiously waits. One is a noiseless typewriter; such an invention would make its patentee rich beyond the dreams of avarice. Another is the dream, or rather nightmare, of every bottle-maker, wine and spirit merchant, and brewer in the world,—a cork which, by some ingenious and yet cheap arrangement, would automatically lock the moment the bottle was emptied of its contents.

THE ART OF BENJAMIN-CONSTANT.

THE late M. Benjamin-Constant, the French painter, is the subject of an appreciation by Mr. M. H. Spielmann in the *Magazine of Art* for August. In reference to the artist's work in portrait painting, Mr. Spielmann writes:

"It was in 1893 that his loving and exquisite portrait of 'My Son André,' now in the Luxembourg Museum, gained him the honor which is coveted by every artist of France for whom medals have any attraction at all. This picture he repeated for his wife, and it was this success probably that gave him a vogue as a portrait painter, and assured him a *clientèle* not in France only, but in America and England. In most of his women's portraits there is an opulence, an *ensemble* of presentation, which is not always in accordance with the best English taste for simplicity and modest grace; but when he did not aim at 'the grand style' he did extremely well. In his men's portraits he was much the more successful; not so much in respect of the merely



THE LATE M. BENJAMIN-CONSTANT.

fine, good-looking man as of those whose faces betrayed real character and subtlety of expression—which were not always flattering to the sitter. There is a world of love and tenderness in his son's portrait, and a world of cunning, of vulgarity, of—wickedness, shall I say?—in others which shall be nameless. At such times Benjamin-Constant was the fine portraitist, worthy, perhaps, of the eminence it was his ambition to reach, as successful a master of his brush as he was brilliant in the rendering of oriental light and color."

THE NEW CATHEDRAL AT WESTMINSTER.

SINCE the time of Sir Christopher Wren, no building has been erected in Great Britain equal in size to the Roman Catholic cathedral now in course of construction at Westminster. Nor is this the only interesting fact in connection with this remarkable structure. Mr. F. Herbert Mansford, writing in the *Architectural Record* for August, is responsible for the statement that none of the existing English cathedrals has so lofty a vault, so wide a nave, or so high a tower as the new erection at Westminster. While Westminster stands tenth in superficial area among the cathedrals of England, Mr. Mansford thinks that in cubical content it may exceed all but St. Paul's.

The erection of the cathedral was not finally

decided on till 1894, the design being intrusted to John Francis Bentley. The style of architecture chosen was the Byzantine, and the site, "hemmed in by lofty flats," forced the adoption of a tower as a conspicuous feature. When this tower is completed it will be nine times its breadth in height,—30 feet square and 280 feet high.

ARCHITECTURAL FEATURES.

The west front of the cathedral at Westminster is exceeded in breadth by only two of the English cathedrals—Lincoln and St. Paul's. Mr. Mansford's description follows:

"The front is in three planes, the higher ones receding in a manner which suggests that the design had been partly governed by considerations of ancient lights. If this be so, we may congratulate the architect for turning necessity to so good account. The lower plane of the work, which rises from a granite plinth, comprises a triple doorway and tympanum within an enclosing arch of receding orders. These spring from columns fluted only as to their upper thirds in height, and connected by a series of festooned and sculptured medallions. On either side are decagonal towers surmounted by copper domes, and beyond these again are the baptistery to the south and a subsidiary porch to the north.

"In the second plane we recognize the carrying up of the outer wall of the narthex. This contains three windows surmounted by a row of shell-topped niches. Here, as in the medallions, we recognize that blending of Renaissance *motif* with Byzantine detail which is characteristic of the whole structure, and gives it a certain piquancy.

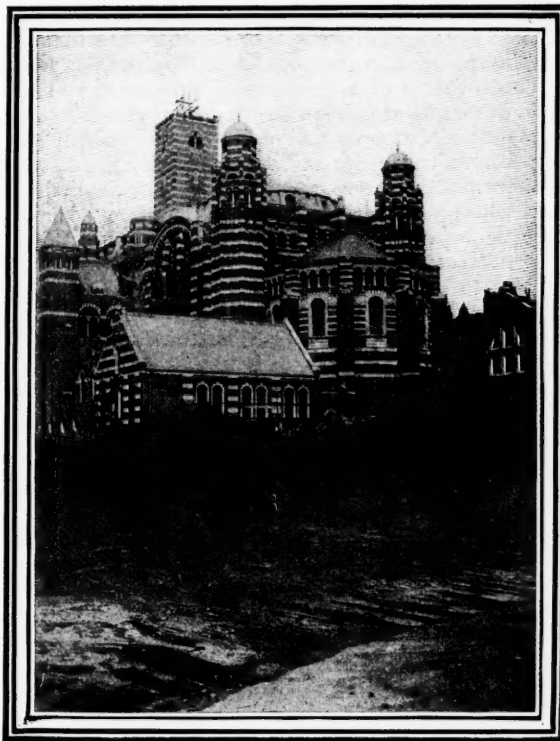
"The third plane discloses the west wall of the nave itself, and is occupied mainly by a segmental-headed window following closely the lines of the semicircular transverse arches within, but lessened in span by the flanking turrets leading to the roof. The walls beyond these turrets are really piers bearing the short barrel vaults which are at right angles to the length of the nave, and form a series of lateral abutments to the thrusts of the concrete domes with which it is vaulted. Passing to the left into Ambrosden Gardens, one notices above the angle porch previously alluded to a charmingly detailed balcony approached from doors recessed behind an arcade, the whole showing in conjunction with features elsewhere the deliberate intention to obtain pleasing effects of shadow. The columns to the doorway beneath are channeled with flutes alternately wide and very narrow; the capitals, too, are of an unusual type. Beyond the tower are the first and second chapels of the nave, which are treated alike with

untraceried windows coupled under an enclosing arch, surmounted by a deep parapet wall of brick with frequent stone-lacing courses, and interrupted by occasional niches. The third chapel is lit by a couple of three-light windows with traceries in the upper portions. Above these chapels rises the lofty wall of the aisle, or more accurately, the curtain wall connecting the buttress piers previously mentioned; and yet higher is visible the wall of the nave proper.

"The transept is roofed at a lower level than the nave, and terminated with twin gables, being internally ceiled with parallel barrel vaults. These transept ends are almost the only gables on the church, and, taken in conjunction with the square turret at the eastern angle of the transept, form a composition less alien in outline than other portions of the structure. The turret is finished with a stone pyramidal roof and connected with the body of the edifice by a short open arcaded gallery, the whole being simply and vigorously treated and somewhat Romanesque in character. The bay of the church beyond the transept comprises the sanctuary, for the raised choir is beyond in the apse. The dome of this bay differs from

those of the nave, being rather lower and pierced with circular-headed windows in its lower portions. Beneath on either side is a large lunette divided into three parts by V-shaped piers, the intervening windows being filled, like several others, with terra-cotta tracery. These traceries are varied in character, sometimes leaning to a reticulated type, and at others to more geometrical design, based on the Italian method of pierced slabs, but are built up of separate blocks, and carried over the whole surface of the windows.

"We have now reached the apse, which, with its open gallery, steep green roof and foliated iron apex cross, backed by the loftier wall forming the square end of the sanctuary, the flanking towers and white concrete dome between, forms a remarkable and beautiful composition. Viewed from the corner of Ambrosden Avenue, where the archbishop's new house forms the foreground, or from the end of Morpeth Terrace, where the steep roof of the sacristy occupies a similar position, the picture includes also a transept and the campanile."



WESTMINSTER CATHEDRAL.

It may surprise some American architects to learn that the materials chiefly used in this great structure are red brick and Portland cement. The dressings, bands, and copings are of Portland stone. "Green slates are used for timber roofs, but asphalted concrete holds undisputed sway over the greater part of the edifice."

Mr. Mansford's conclusion is that the building is likely to exert a far greater influence on church design than any purely classic or Gothic structure could have done at this stage of architectural evolution, and that it will occupy a more important place in the history of the styles than most of the

buildings of the Gothic revival. Of the architect he says:

"Mr. Bentley has come as near the development of a new style as it is probable one man ever can, without the invention of some new method of construction. His Neo-Byzantine is as distinctive as the Neo-Romanesque of H. H. Richardson. The curious thing is, however, that whereas the latter consistently developed his favorite style through a long series of works, Mr. Bentley has hitherto given us examples of English Gothic, or English Renaissance, sometimes with

suggestions of Flanders, or the chateaux of the Loire; but not, so far as the writer is aware, anything approaching in construction or detail the character of the work under consideration. It is the artistic and inventive intellect of the man, visible throughout the whole structure, which gives Westminster Cathedral its chief interest in the eyes of architects. The lay mind can scarcely be expected to detect this fully at first, but recognition of it must ultimately come to all who study the building with sympathy."

QUEEN ALEXANDRA.

IN the ceremonies of August 9, the part borne by Queen Alexandra interested the great public hardly less than the crowning of King Edward himself. Since the death of Queen Victoria many English writers have endeavored to interpret the new Queen to her subjects; but it is doubtful whether any of them has succeeded so well as Mlle. Vacaresco, who presents in the *Contemporary Review* for August a vivid, picturesque, and fairy-like portrait of the woman whom all Britain now delights to honor. Mlle. Vacaresco is a child of southern Europe; she is a woman who is writing of one whom she knows and loves; and the reader would willingly sacrifice a thousand dull studies in black and white for this delightful presentation of Queen Alexandra, as radiant and glorious as the figure of a saint in a cathedral window. There is imagination here, and poetry, and a capacity to present one woman's enthusiasm for another in language that is worthy of the theme.

WITH CARMEN SYLVA AT BALMORAL.

Mlle. Vacaresco was attached to the court of Carmen Sylva when she first visited Balmoral, and the influence of the royal poetess of Roumania is perceptible in the story which she gives us of her impression of the Queen. She had been presented to Queen Victoria, and had felt what Bouget calls *le frisson de l'histoire*—the great shiver of history—"in seeing before me so many years of glory represented by a kind old lady, whose clear blue eyes looked straight into my heart; whose voice, distinct yet gentle, questioned me pleasantly on our journey and our first impressions in Scotland." She could not have answered had she not perceived by the side of the Queen "a face so soft, beautiful, and reassuring that I kept wondering who the dazzling unknown might be. Her eyes had the azure, intense and bright, of the water where sirens meet." She thought that she was one of the youthful daughters of the Prince of Wales, and "my admiration and worship went toward her

only because of her smile and the intense azure of her eyes."

HER MEETING WITH QUEEN ALEXANDRA.

They talked a little, and Mlle. Vacaresco expressed a wish to be introduced to the Princess of Wales. "You have just been speaking to the Princess," said Carmen Sylva, and so their acquaintance began. Carmen Sylva described the glories of the Roumanian landscape. Then Princess Alexandra spoke in her turn, describing the charm of the northern landscape, reminding the listener of Victor Hugo's dialogue between the Peri and the fairy, and the oriental queen and the star of occidental skies.

Next day, in the forest, she again met Princess Alexandra, who seemed to her to represent springtime and hope. "I had seen a fairy among the purple hills of Scotland in the dark December day."

A few years later she met her again in Rome, and in the pagan splendor of Roman noon, three months after the death of the Duke of Clarence. She was awed by the rigid white face, and the smile that had been broken like a flower from its stem.

The third time she met her at Marlborough House, after the death of Queen Victoria. The Queen said: "A great duty has now fallen upon me, a great task is set before my soul." In reply to a remark of her visitor, the Queen said:

"Yes, the King knows how to make himself beloved. He understands and cherishes the nation. But if they love me, it is only because they are so good and true. You cannot imagine how good, how true, the people are in England, in all classes everywhere. There are some princesses and reigning queens, are there not, who ever feel themselves strangers in the lands that become theirs by marriage? I have never known this feeling, not one single moment, and now I never succeed in discerning that I am not born here; it seems to me as if even my childhood had been spent here, and even when I am away from this land I am not absent. I am here, and I am in every corner of England, as if I belonged to this earth entirely. The people are so good. They partake of all our joys and sorrows, and their joys and sorrows are ours."

When the Queen dismissed Mlle. Vacaresco, she stood in the green light of the neighboring trees exactly as she had stood in the autumn forest, and again she represented springtime and hope, serenity and strength.

QUEEN ALEXANDRA'S LIKES AND DISLIKES

In addition to her account of her three meetings with the Queen, Mlle. Vacaresco tells us

something concerning the Queen's tastes. Music, she says, is one of her great delights. She has a deep-rooted taste for art, and discerns the great part art is called upon to play in modern society. She not only encourages artists, but also explains to them how much she relies on their talent and their help in hours of depression. Poetry, however, the Queen prefers to everything else. She is accustomed to recite aloud the poems that please her, provided she be quite by herself. She detests exaggerations of feminism, and lays particular stress on her disapproval of those doctrines; but she esteems the labor of womanhood in the lower classes, and admires women poets, singers, and painters. Dogs she prefers even to horses, and hearing once a remark that Michelet called dogs candidates for humanity, the Queen remarked that Michelet was wrong if he thought a dog would not be content to remain one, even though he had the choice; though, she added, what would tempt a dog or any other animal to enter the ranks of mankind would be the prospect of possessing an immortal soul.

It is impossible to carry on a long conversation with the Queen without being struck with the evidence of her piety. "Goodness in women is the chief virtue, and outshines all other qualities," said the Queen. "When a woman is good, she can do without beauty and talent. Goodness is the eldest sister of intelligence."

THE COLONIAL CONFERENCE.

IN connection with the meeting of the colonial conference in London this summer, it is interesting to recall the fact that the first conference of this kind sat in April-May, 1887, Lord Knutsford being Colonial Secretary; the second was held in 1894, Lord Jersey attending on behalf of the British Government, and Lord Ripon being colonial minister. The colonial premiers at this conference first adopted a resolution in favor of preferential trade within the empire, and recommended the repeal of the treaties with Germany and Belgium, which rendered it impossible for the colonies to give preference to British trade. The third colonial conference was held in the jubilee of 1897 in London, Mr. Chamberlain being Colonial Secretary. It was at this conference that Mr. Chamberlain proposed the formation of a federal council, which was rejected, the conference resolving that the present political relations between the United Kingdom and the self-governing colonies are generally satisfactory under the existing condition of things. Mr. Seddon and Sir Edward Braddon were the only dissentients.

At the conference this year Mr. Chamberlain summoned the colonial premiers to discuss with them questions of the political relations between the mother country and the colonies, imperial defense, and the commercial relations of the empire.

THE QUESTION OF A ZOLLVEREIN.

The current number of the *Quarterly Review*, after setting forth the various stages through which these conferences have passed from the beginning, passes in review the history of the efforts which have been made to establish a zollverein. A British zollverein, it declares, need not be discussed. It may be desirable, but it is not desired. The colonies have no wish to revolutionize their own fiscal systems. All that they are willing to do is to give a certain preference to British goods. Mr. Hofmeyr, in 1887, made the first proposal in this direction. He suggested that an imperial navy tariff of 2 per cent. should be levied at all ports of the empire on all goods entering the empire from abroad, irrespective of existing tariffs. This, he calculated, would yield seven millions sterling, of which the people of the United Kingdom would pay by far the largest part. Colonel Denison proposes to raise the tariff to 10 per cent., which would yield forty-four millions, the United Kingdom paying forty-one millions, and Canada and Australia three and a half millions. The *Quarterly Review*, therefore, dismisses the Hofmeyr-Denison scheme as a revolutionary and perilous enterprise outside the scope of practical politics. The only thing possible to be done is to accept with thanks any offer which the colonies may make of refusing duties on English goods. The reviewer prefers much the schemes for developing steamship services rather than propositions to restrict trade by imposing fresh taxes. For a forward policy in this direction time is fully ripe.

IS A KRIEGSVEREIN POSSIBLE?

A zollverein is impossible, but a kriegsverein ought, in the opinion of the reviewer, to be regarded with more favor. But he regretfully admits that in military matters the volunteer principle is likely to continue as in political and voluntary. All that can be done in that direction is to establish a common understanding with regard to armament schemes of mobilization, the formation of reserves, and other kindred matters. In the field of law something might be done to create an imperial court of appeal, composed of a combination between the House of Lords and the Judicial Committee of the Privy Council, which would be a better symbol of the empire than

even the Parliament at Westminster. Besides the constitution of a court of appeal something might be done to give a uniform imperial law in the matter of trade-marks, copyright, patents, naturalization, and emigration.

SHALL THESE CONFERENCES BE PERIODICAL?

The reviewer concludes with a suggestion that steps should be taken to give some periodicity to the meeting of colonial conferences. Some day there may be evolved an imperial council advising the crown, and acting as a medium between the groups of federated states and the great executive officers in charge of imperial interests.

OUR NAVY AND ITS COST.

At present there are ten first-class battleships building in the United States,—a larger amount of new construction work than any other nation has in hand except the English navy, and that has only three more. When our new navy was begun we were twelfth or fourteenth among the world's sea powers, and now we are, say, fourth, and probably on the way to being third, in efficiency. Great Britain and France are the only powers which could confront the United States with such an overwhelming force as to put the general naval board at Washington to studying the defensive problem. Although Japan's navy is stronger in its own waters than that of any other one navy permanently maintained on the same coast, it has no place in the world-reckoning of navies. Dr. Talcott Williams discusses the United States' new navy and the cost of supporting such a luxury as a first-class modern fighting fleet in the *Atlantic Monthly* for September.

TWENTY-FIVE MILLION DOLLARS A YEAR ON NEW CONSTRUCTION.

This is the price, Dr. Williams tells us, of the maintenance of a first-class sea power, and only five national budgets can afford it: England, the United States, Germany, France, and Russia. Of these, England and France are in advance of the rest. If the world's battleships are reduced to terms of the *Indiana* or *Massachusetts*,—10,000 tons, 15-knot speed, four 13-inch guns,—launched within fifteen years, the United States, in 1890, was sixth, being led by Great Britain, France, Italy, Russia, and Germany. By 1896, the United States had passed Germany on that basis, but was still led by the rest, and by 1902 the United States has passed Italy, and is led by Russia, if existing, or by Germany, if approaching, naval strength be considered. There will be a period, just as the twelve battleships and

two armored cruisers, building or authorized, are completed, when in the fighting line, measured by efficiency, the United States will be third. But the period will be brief, unless our naval expenditure for new construction is kept up to an inexorable annual average of from \$25,000,000 to \$30,000,000. "This is to-day the minimum price for the naval security of a first-class power, one of the Big Five, whose common action and consent rule the world, and make up a world concert steadily gravitating into three divisions,—Russia and France, Germany and central Europe, England, and the United States,—in which last recent events in China and South Africa have suddenly burdened the United States with many of the responsibilities and some of the initiative of a senior partner."

THERE ARE NO SMALL FLEETS TO-DAY.

Dr. Williams points to the fact that all the lesser fleets have disappeared. They existed even twenty years ago. Two centuries ago Holland was still equal to an even fight with England, and the battle of the Baltic had its centenary only last year; while it will be five years before the centenary of the Danish surrender to the British fleet, and until these twin events Denmark had still a fleet deemed worth destroying at the cost of an act of atrocious bad faith. Even the Barbary states had fleets up to a century ago equal to naval warfare. In 1881, Chile had a stronger fleet than the United States. There were then at least a dozen flags capable of giving a fair account of themselves. These have disappeared. The little folk among the nations have ceased to maintain navies. The fighting force of the five great nations has become so visible and so calculable that nothing else is considered. The lesser powers own vessels. They no longer possess a navy in any proper sense of the word.

THE AMERICAN END IN NAVY BUILDING IS MODERATION.

Dr. Williams traces the work of building a real American navy from the discussions of the first Naval Advisory Board twenty-one years ago, at a time when this country still thought it could safely place on the sea a small and efficient navy, easily to be made the nucleus of a larger one,—our naval policy since John Paul Jones. The striking characteristic of our new navy, Dr. Williams says, is moderation, a balance between extremes, ships of moderate size, eschewing extreme speed, of great power and unusual stability, and of low, but safe metacentric height. Our guns are not of the abnormal caliber some European governments have used. The armor

is not of inordinate thickness, because our harbors have shallow entrances, fixing the best draught at under twenty-five feet, though later vessels reach the English limit of twenty-seven feet and an inch or two. Dr. Williams ascribes no small share of this even balance of ship and armament to the wisdom of Mr. Charles H. Cramp.

But although the battleships built by the European governments have a higher speed requirement than the American ships, Dr. Williams points out that the tests are very different in America and Europe. Our speed trials are much more severe. The English and Continental speed test is a mile in smooth water, over whose familiar stretch a vessel speeds with forced draught, picked coal, trying it again and again, often with several breakdowns, until a fancy record is won. The American speed test is for forty miles in blue water, unsheltered, with service coal and service conditions. The allowance this calls for no one can give. But it exists, and is important. "The *Oregon* in her matchless voyage around South America under Admiral Clark, the one supreme feat of the war, averaged 11 knots, attaining 14.55 on one run of nine hours, far nearer its trial trip of 16.7 knots than is likely with the *Centurion*, begun in the same year, of the same tonnage, and 18.25 knots."

A WEAK POINT IN OUR NAVAL MANAGEMENT.

We are building battleships rapidly, and probably as fast as necessary, but there are three factors in a modern navy needed for its success,—ships, officers with men, and equipment. Officers are still inadequate in number for American ships. "There remains the swarm of subsidiary naval aids, coaling stations, dockyards, material, and a distributed store of ammunition. How scant this last was in the spring of 1898 will not be known for a generation. Two ships went into one of the two actions of the war with eighty-five rounds or so per five-inch gun, when they should have had one hundred and twenty-five. Some thirty-five rounds won the fight. Suppose it had not? Without fortified bases in the West Indies, in the Hawaiian Islands, and in the Philippines, and all needs of war at hand at home, our fleet at the critical moment may be like a boiler without steam. This third need Congress and Parliament both fail to meet."

Dr. Williams says that as we are pledged to protect the Western World from aggression, we must keep our present station of fourth among the naval powers at all costs. To do this the United States must add to its nineteen first-class battleships as many more in the next sixteen years, or two to each Congress. We will then never have to resort to force to support the Monroe Doctrine.

THE CAPE TO CAIRO TELEGRAPH.

ONE of the famous projects of the late Cecil Rhodes was the Cape to Cairo telegraph, 5,600 miles long when finished, which Mr. Rhodes hoped would reduce the cost of cabling from Cape Town to London from about \$1.10 to 25 cents a word. Part of the line has been in use some time. Its entire length is marked at intervals with the graves of those who have died in constructing it. Far ahead,—sometimes 200 miles,—of the engineers are always Mr. Otto Beringer, the surveyor, and two assistants and native porters. In *Harmsworth's Magazine* for July Mr. F. A. Talbot describes some of the difficulties of carrying out the undertaking.

Steel posts must be used instead of wood, which is liable to be devoured by ants. The difficulties of transport have been enormous. Everything is transhipped at the coast on to shallow boats which go as far up the rivers as possible; then native porters are used. Over one hundred engineers and several thousand blacks are employed in building the telegraph.

When the wire passes through forests a wide clearing is made, and the posts (generally weighing 160 pounds) are planted in the middle of it, to avoid falling trees. Elephants, unfortunately, are particularly fond of rubbing against the posts, and rubbing them down altogether, but the line is now so well patrolled that any mishap can soon be put right. Electric shocks practically taught the natives to keep from meddling with the wires. Sometimes the line is overtopped by the luxuriance of the vegetation, which the natives refuse to cut down for fear of crocodiles. Sometimes a tree of 100 feet circumference has to be cut down. Rainy seasons interrupt work periodically, and fever marshes and wild animals are, of course, constant dangers.

All along the route are frequent depots of repairing materials. How costly these must be may be guessed when it is said that the tariff between Nyassa and Tanganyika is \$150 a ton.

The highest speed at which the construction has been carried out is twenty miles a week.

THE PACIFIC CABLE ROUTES.

PRESIDENT ROOSEVELT'S decision, on August 8, in the matter of concessions to the Pacific Commercial Cable Company, recalls public attention to the fact that the United States now controls the most important routes for Pacific submarine cables.

The enormous disadvantage under which we now labor in the transmission of messages from the United States to the far East is made clear in an article contributed by the Hon. O. P.

Austin to the *National Geographic Magazine* for August:

"Messages from the United States to the Orient at present go via Europe, through the Indian Ocean, skirting the eastern coast of the Asiatic continent, traveling enormous distances, handled several times, and occupying considerable time in transmission, to say nothing of the high rates of toll which must be paid for this circuitous service.

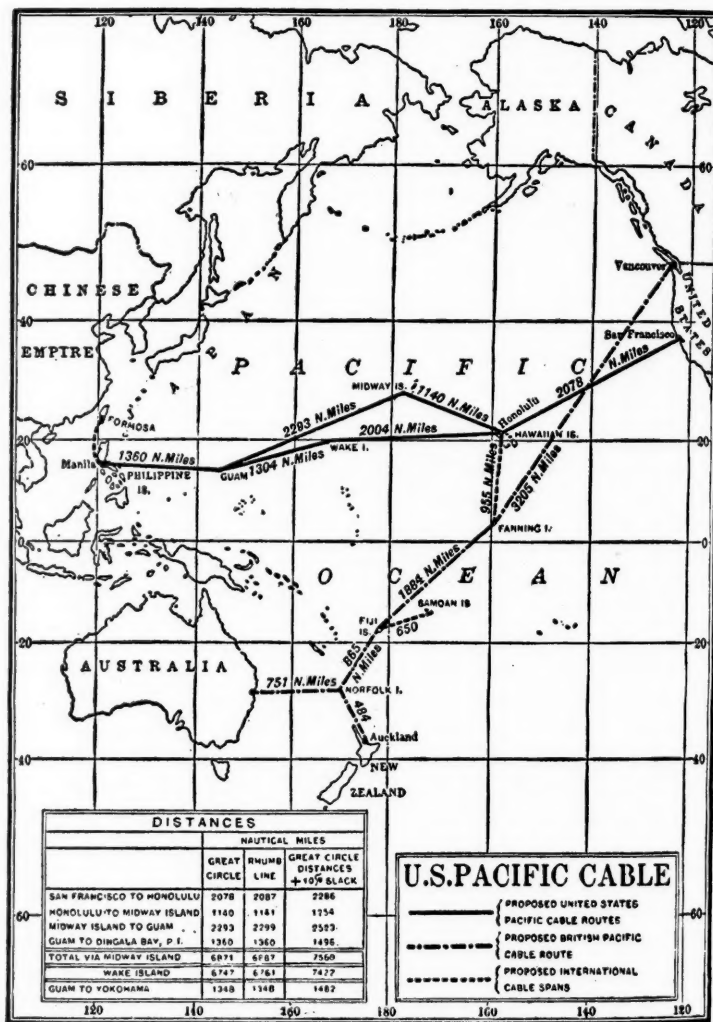
THE UNITED STATES HOLDS
THE KEY TO THE SITUATION.

"The experience of cable builders and operators is that a distance of 3,500 miles is about the limit at which cables can be satisfactorily operated without way stations, at which the messages are transmitted from section to section of the line. It is because of this fact, and because there are few places in the Pacific in which islands are so located as to furnish the necessary way stations for relays, that the construction of submarine telegraphs across that ocean has not been undertaken. Even where islands exist at such intervals as to justify the attempt, they were so divided in national control that no country or group of capitalists cared to undertake this enormous task. But now all this is changed. The events of the past three years have brought under the control of the United States a line of islands stretching at convenient intervals from the western coast of America to the eastern coast of Asia. The Hawaiian Islands, Wake Island, Guam, and the Philip-

pinos form a continuous line of great natural telegraph poles upon which we may string a wire or series of wires, by which we may converse across this great body of water, stretching half-way round the globe, making every one of its intermediate landings and relay stations on our own territory, and protected by the American flag."

THE BRITISH PROJECT.

"Meantime England has decided to attempt to connect the western coast of Canada, via Fanning Island, the Fiji group, and Norfolk Island, with her southern Pacific possessions of Aus-



tralia and New Zealand. The proposed routes of these two cable systems are shown on the map here presented.

"It is proposed also to construct connecting links between Fanning Island and the Hawaiian Islands, and by a short side line connect the Samoan group with the main line. This would give to the American and the British lines an opportunity for an interchange of business, and

put all the important groups of the Pacific,—the Hawaiian group, the Samoan Islands, the Fiji group, Guam, and the Philippines,—in direct cable communication with our western coast, and enable vessel owners and owners of their cargoes to communicate with them *en route* to and from this great market which we are seeking to invade."

PANAMA VERSUS NICARAGUA.

THE published extracts from the reports of the Isthmian Canal Commission have made the public fairly familiar with the reasons that determined the choice of the Panama route. Articles written by members of the commission have also supplied important data. Last month we quoted from Professor Burr's paper in the *Popular Science Monthly*. In the August number of that periodical the same authority sums up concisely the relative advantages of the two routes as follows:

"Both routes are entirely 'practicable and feasible.'

"Neither route has any material commercial advantage over the other as to time, although the distance between our Atlantic (including Gulf) and Pacific ports is less by the Nicaragua route.

"The Panama route is about one-fourth the length of that in Nicaragua; it has less locks, less elevation of summit-level, and far less curvature, all contributing to correspondingly decreased risks peculiar to the passage through a canal. The estimated annual cost of operation and maintenance of the Panama route is but six-tenths that for the Nicaragua route.

"The harbor features may be made adequate for all the needs of a canal by either route, with such little preponderance of advantage as may exist in favor of the Panama crossing.

"The commission estimated ten years for the completion of the Panama Canal and eight years for the Nicaragua water way, but the writer believes that these relations should be exchanged.

"The water-supply is practically unlimited on both routes, but the controlling or regulating works, being automatic, are much simpler and more easily operated and maintained on the Panama route.

"The Nicaragua route is practically uninhabited, and consequently practically no sickness exists there. On the Panama route, on the contrary, there is a considerable population extending along the entire line, among which yellow fever and other tropical diseases are probably always found. Initial sanitary works of much larger magnitude would be required on the Panama route than on the Nicaragua, although probably as rigorous sanitary measures would be re-

quired during the construction of the canal on one route as on the other.

"The railroad on the Panama route, and other facilities offered by a considerable existing population, render the beginning of work and the housing and organization of the requisite labor forces less difficult and more prompt than on the Nicaragua route.

"The greater amount of work on the Nicaragua route, and its distribution over a far greater length of line, involve the employment of a correspondingly greater force of laborers with attendant difficulties for an equally prompt completion of the work.

"The recent volcanic eruptions on the Island of Martinique indicate a possible danger to the Nicaragua canal, should it be built, from the living volcano of Ometepe, in Lake Nicaragua, about ten miles from the land line. That there is some danger is beyond question, but it is very remote. There is no evidence to show that a canal or canal structure ten miles distant from Mont Pelée would have been injured by its recent eruptions, although navigation might have been interrupted for a short time. It is an open question, therefore, whether Ometepe in most violent eruption, even, would injure the Nicaragua Canal, although danger would exist.

"On the other hand, as there is no volcano within about one hundred and seventy-five miles of the Panama route, that route would be free from all danger of volcanic eruption."

In regard to the negotiation of concessions and treaties, Professor Burr thinks that there is not much choice between the two routes, although he admits that the Nicaragua route may, perhaps, be "freer from the complicating shadows of prior rights and concessions."

THE REVOLUTION IN COLOMBIA.

IN view of the relations into which we are likely to be brought with Colombia through the construction of the Panama Canal, the political disturbances in that country already possess more than an academic interest for the people of the United States. This being the case, it seems strange that the accounts of the present revolution furnished to the American press should be so few and so meager. An attempt to present the main facts of the situation down to the month of February, 1902, is made in the August number of the *Missionary Review of the World*. The name of the writer of the article is not given, but he is said to be fully deserving of confidence.

The revolution was begun on October 17, 1899,—almost the precise date of the outbreak of the Boer war. The government is said to have

placed 75,000 men under arms, and the revolutionists are believed to have mustered 35,000. Some 400 combats of greater or less importance had been reported up to February last; the number of men killed on both sides, up to that time, was estimated at 50,000.

The Conservatives themselves deposed President San Clemente two years ago, and the Vice-President, Dr. José M. Morroquin, was placed at the head of the government. His administration has been seriously handicapped by the lack of concord among the Conservative leaders.

FINANCIAL CHAOS.

The desperate plight of the Colombian finances was described by Mr. Edwin Emerson, Jr., in an article on "South American War Issues" contributed to the REVIEW OF REVIEWS for March, 1902. The Colombian peso has declined in value, since the outbreak of the war, from 25 cents in gold to about two cents. There are now about 200,000,000 pesos of inconvertible paper currency in circulation, which is legal tender for all debts and obligations. The *Missionary Review* writer describes the resulting situation as follows:

"The poorest people, who earn their living by the sweat of their brows, are those who have suffered the most. The government has also found that the issue of paper money will not supply its necessities. Foreign exchange must be bought with which to get war materials, and as it requires some fifty pesos to buy each dollar, this falls with crippling force on the treasury. Although the government had yielded to the temptation to issue larger and larger sums of paper money, and had seen its pernicious effects on the morals of the people and on the integrity of the government itself, there was no remedy except to continue or to confiscate the property of the people for public uses. The result has been a compromise in which the evil effects of both measures are clearly felt. Confiscation of property, forced loans, and contributions of war have been required of the people, and especially from those who are known to sympathize with the revolutionary party.

"The effects of these measures are most deplorable. Industry of every kind has been almost completely paralyzed, agriculture destroyed, many of the farmhouses burned, and villages abandoned; and now, with the forced loans and contributions of war, the banks and commercial houses in all the business centers of the republic are on the verge of ruin."

REASONS FOR THE WAR.

Following is the indictment of the government as presented by the Liberal, or revolutionary, leaders:

"The Conservative party has suppressed 'parliamentary government,' and has established in its place a 'presidential government.' The real meaning of this expression is that the development of the Colombian Government is exactly the contrary of that of the English Government. In Colombia the real power is lodged in the president, while in England it is in reality in the House of Commons. The president cannot be called to account for his actions, and he possesses extraordinary power to issue legislative decrees and to execute the laws by what is known as 'the administrative process.' He appoints his cabinet, the governors of the states, and all executive officers, either directly or through those whom he has already appointed and can remove at will. These officers become his personal agents. The courts decided in the case of *El Heraldo*, a printing establishment, that the governor of the department could not be tried by the courts for closing the establishment without process of law and in time of peace, because in doing so he was acting under express instructions from the president, who is not responsible to the courts for such matters. To change this plan of government is one of the objects of the revolutionary leaders, and they believe that only an armed insurrection can change it.

"All members of the Liberal party have been excluded, not by law, but by the practice of the 'powers that be,' from all civil and military offices ever since the Conservatives came into power. This is in general true, and the excuse made by the government party is that the opposition has made known its intention to overthrow the government at the first opportunity. The Liberals say that no remedy can be found in the government itself, for the powers of Congress are exceedingly limited, and that no legislation could even be proposed without the consent of the 'Council of State' (composed of men entirely under the control of the presidential party). In addition, the election laws, and the practices under them, are such that the government party can prevent the return of any candidate that it may wish to exclude, as has constantly been done since 1886. This fact, admitted in its general terms by all parties in Colombia, is used to justify the plea that the institutions ought to be reformed, and cannot be reformed except at the point of the bayonet.

OPPOSITION TO THE CHURCH.

"Again, there is a Church question involved in the strife, so that the clerical party is entirely on the Conservative side. The Liberal party affirms that the favors shown to the Roman Catholic clergy, orders, etc., in exemptions of

trials before the common courts and from the payment of taxes, import duties, etc., are unjust to the rest of the population, and should be abolished. Strong objections are made to the laws that place the entire control of education at public expense in the hands of the clergy, and to those that place the administration of the public cemeteries in their hands, because they are abused for party and Church interests. Equally strong objections are made to the marriage laws, as these laws are administered and offenses against them are judged by the clergy. Violent objections are also made to the payment to the Church officers of an annual tax of considerable proportions, on account of some claims that the Church has made against the government of Colombia for property taken years ago."

The Conservatives, on the other hand, charge the Liberals with opposition to the Roman Catholic Church, not so much on account of disliking the exemptions granted and the privileges given, as on account of opposition to all religion, and because they desire to live irreligious and immoral lives.

WHAT WILL THE OUTCOME BE?

This writer indulges in no rose-colored prophecies regarding Colombia's future. As to the evil that has already been wrought, he is very positive. He says:

"A statement of the prospects before the country must necessarily be defective, because at present we cannot judge whether it is likely that the attempted revolution will triumph by force of arms or be suppressed. This much we do know, that the material civilization of the country is completely prostrated, and that it will be years before it can be reestablished even under the best form of government. The loss of so many of the young men of the country has taken away the working force, and so will retard its recovery. The great debt that rests on the country, not only to pay the claims of the foreigners and citizens who have suffered in their persons and property, and to meet the claims of Colombians who have given of their lives and substance in the strife, but also to meet the great issue of paper money that has been made, will stagger the treasury for years to come. The return to a sound currency will be more trying on the people than any financial question they have ever tried to solve in the past. But this is not the worst; passions have been inflamed that will not cool for years to come. Already these have destroyed thousands of lives and millions of property, and it looks now as if much more blood must yet be shed and more property destroyed before the end will be reached.

"Although it may seem as if the reactionaries are in the majority in only a few places, yet they are in power, and they will not give up without a more furious struggle, that will be fought from hilltop to hilltop all over the Colombian Andes. On the other hand, the revolutionary party seems to be determined to win or to perish in the attempt. They state that they intend to continue until they unseat the existing administration and reinstate the reform party. The form that the civilization of Colombia will take depends to some measure on the political organism that remains in power after this struggle is over, and this cannot be predicted at the present time."

KANSAS OF TO-DAY.

AN excellent article, describing the past ten years' vicissitudes of the great State of Kansas and her prosperity to-day, is contributed to the September *Atlantic Monthly* by Charles M. Harger. He says that it is not only the good crops of the past few years that should have credit for the present prosperous condition of the Kansas farmer; the habits of thrift acquired during the hard times after the bursting of the boom in 1887, and the sturdy character of the people of the Sunflower State, would by this time have brought the great grain-growing community into good times, even without "bump-er" crops. This is, in brief, the Kansan's experience of the past generation.

THE SETTLEMENT, THE BOOM, AND ITS COLLAPSE.

"On an exaggerated parallelogram, tipped 3,000 feet higher at the west end than at the east, a million and a half people settled in two decades. Many of them did not comprehend that the farming which might succeed in the East, or even along the Missouri border, would be a failure on the high-tilted prairie, because of a lack of rainfall. Then there was the experience of the boom, that surging time when town lots spread out until they seemed likely to absorb the farms. The day of reckoning came next. Two hundred thousand people moved out of the State. Some went in Pullman cars, some in wagons, and some walked. Mortgaged claims were deserted, houses and stores were left empty, land in the 'additions' once more sold by the acre instead of by the lot."

THE TEACHINGS OF ADVERSITY.

Out of this came the political vagaries by which Kansas was so largely known to the world in the nineties. But in the meantime the people were profiting by the lessons of adversity. They had learned that kaffir corn and alfalfa would stand

the drought, that cattle and sheep would thrive in western Kansas, that diversity of crops would give regular returns, that creameries paid good dividends, that hogs were more profitable than parades,—in short, Kansas was a good place to farm in after all, if you did it in the right way.

THE REGENERATED KANSAS.

"In 1897, the Kansan stopped talking about wanting to sell out that he might go back East; in 1898, he was better contented; in 1899, he raised the price on his real estate and built a porch and bay window; in 1900, other improvements followed, and he congratulated himself on his foresight in having remained while so many left the State.

"In the five years ending with the crop of 1901, Kansas raised 323,176,464 bushels of wheat and 681,452,906 bushels of corn. These were indeed fat years. The corn crop of 1889, 273,888,321 bushels, and the wheat of 1901, 90,333,095 bushels, were the largest in the history of the State,—but the average annual yield of wheat for ten years has been 40,450,354 bushels, and of corn, 142,856,553 bushels, the average total value of both crops being over \$60,000,000. The records of the State agricultural board show that for thirty-four years the average yield of corn, whether in corn territory or where none at all grew, was twenty-seven bushels per acre, and for twenty-five years the average farm value of Kansas corn per acre has been \$7.31.

"While 16 counties raise more than half the wheat of the State, 55 counties out of the 105 produce good returns of that cereal. Now that there seems to be a fairly clear understanding of the agricultural limitations, a much better record should be possible. The fact that in two years past the increase in the value of agricultural productions and live stock has been \$51,278,936 over the preceding two years gives good reason for the encouraging outlook. Each year the live-stock interests assume larger proportions and greater value,—and the products of the range are affected little by dry weather. The average total product of farm and ranch for twenty years has been \$142,861,380 annually.

"The State banks had on deposit in December, 1896, \$34,553,000; in September, 1901, they had \$42,000,000, while the national banks had \$45,000,000 more. In the past five years, besides reducing mortgages and laying up \$50,000,000 in increased bank deposits, the State has made progress in its public finances. The counties, cities, and school districts refunded \$6,200,000 of bonds at a saving of one to two and a half per cent. in interest rate. The actual reduction in the principal of bonds for the year ending

July 1, 1900, was \$2,978,321. This was in spite of the fact that many counties issued new bonds for public buildings and other improvements."

A CITY REAL-ESTATE "TRUST."

THE United States Realty and Construction Company, the extraordinary combination recently effected in the city of New York, is the subject of an article in the September *World's Work*. The United States Company consists of five of the strongest real-estate corporations in the metropolis, and is capitalized at \$66,000,000; it has, too, the direct and indirect backing of the strongest financial institutions in America. The George A. Fuller Construction Company, the most important concern of the five which have been merged, has enjoyed great success in the business of erecting large office buildings in Chicago, Baltimore, and Washington, as well as in New York and other large cities.

The idea of dealing in real estate as so many shares of stock is comparatively new. Up to the present time the business has been in the partnership stage, and this ownership of real estate by private individuals or estates has led to much vexatious litigation over the division or partition of properties.

THE ADVANTAGE OF THE NEW PLAN.

"In commercializing real estate this new combination will view each large property which is purchased as a great industry, to which must be applied the same rules of economy and careful management as is the case with large manufacturing plants. When the property is first purchased, the question of title will be forever settled. An investor buying a share of stock in that land will no more think of inquiring into the title than he will concerning the title of a railroad to its plant. Deaths will not destroy the integrity of the property. The shares will pass to the proper heirs just as any other personal property."

The promoters of this enterprise believe that it will give an advantage to the purchaser of real estate, in the first place, because small holders will hesitate to persist in obstinate demands for too high a price in the face of the competition that so powerful a company can give. If such holders won't sell at any fair price, they might be induced to come in and accept shares of the new corporation. Even with its great capitalization, the United States Company could not, of course, control any large portion of the real estate of New York, and it is proposed to turn over new properties to subsidiary corporations, which will be formed by the parent company.

"There would next be a saving in architects'

charges, contractors' commissions, and in the purchase of materials. The corporation under discussion will probably enjoy peculiar advantage in the construction of steel buildings from the fact that the steel trust president is to be a director. But any corporation erecting one building instead of five upon the same plot of ground would enjoy large economies in this respect. In the building itself there will be greater opportunities for light courts, thin partitions, and economies of space in every particular. The elevator equipments could be very greatly improved, as well as securing the savings incident to the operation of only one plant.

ECONOMIES IN MANAGING THE LARGE BUILDINGS.

"In the conduct of these large buildings there will be yet more economies. The layman little realizes the quantity of supplies necessary for the extensive office structures in our cities. Great economies could be effected through large purchases in brick. With a tremendous building under a single management, there could be great division of labor in the matter of janitor service, there would be necessary only one superintendent. The collection of rents could be economized. It would be possible also to place in such a building unusual conveniences for the benefit of the tenants and still preserve the net economies which have been specified. The idea of having a stenographic establishment, a bookstore, a soda fount, a barber shop, a manicure establishment, a dentist, an oculist, a surgeon, a physician, and others in a great office building has already been partly developed. It is possible to do much more."

AGRICULTURAL TRAINING FOR WOMEN.

THE Countess of Warwick is at the head of a movement in England which has for its object the education of the "daughters of professional men with large families and small incomes." In establishing the so-called Reading Hostels the object of the countess was twofold. She wanted to make a new opening for educated women by training them in the lighter branches of agriculture, and at the same time to benefit the farming interest by raising an army of trained women to do battle in its service. The first of the Reading Hostels was opened in 1898, and accommodates twenty-four students. Brook House, opened in 1899, accommodates fourteen, and the Maynard Hostel sixteen. In 1900, a pair of six-room cottages were built, and two large greenhouses erected. There were nine and a half acres of land rented for practical work. The students are instructed in gardening, poultry-rearing, bee-keeping, and dairying. They

have no laboratories, however, so that all scientific work has to be done at Reading College, which is very dear.

Lady Warwick started with a capital of £1,500, but now the time has come for launching out on a larger scale. She wants £30,000 to build an agricultural college for women. The appeal in the *Times* and at the Mansion House only brought in £600. The fees for the students at the hostels which are already opened vary from £65 to £126 a year, including board and residence and training. Starting with 12 students in 1896, 168 have now attended a longer or shorter course of training. Lady Warwick would like to fix a minimum limit of two years for training, but she would not exclude short courses, and lectures are given to non-resident students in the neighborhood. Every student who has been through the full course of training has obtained a salaried post on leaving.

A COLLEGE AND "SETTLEMENT" SCHEME.

To help on the movement she has founded an agricultural association for women, with the *Woman's Agricultural Times* as its official organ. This association, started in February, 1899, now numbers thirty patrons and one hundred and thirty-two associates in many parts of the world. Her dream for the future is that several women should take a cottage and several acres of land to start with, so as to form women's agricultural settlements in various parts of the country. She would have them work it on the allotment system as a market garden, or horticultural farm, or small dairy farm, combined perhaps with bee-keeping or fruit-growing. Three students have already applied for cottages next year. She has opened a new department of work at Reading this year for colonial training. The course extends over one year, of which three months will be devoted to each of the following groups:—cooking, housewifery, laundry and dressmaking, dairy and poultry-farming, flower, fruit, and vegetable gardening. The students are taught to find substitutes for every-day necessities, such as making their own yeast from the potato. Their training, in fact, will consist very largely in doing without things. With the £30,000 endowment Lady Warwick says an agricultural college could be founded which would take in between fifty and sixty students under one roof. They could build their own laboratories, supply their own teachers, and rent two hundred acres of ground, on which all the practical work could be done.

Lady Warwick makes her appeal to the British public through the pages of the *New Liberal Review* for August.

THE FIRST PUBLIC MAN INTERVIEWED IN ENGLAND.

"WHO was the first public man ever interviewed in England?" Sir Wemyss Reid, in *Great Thoughts*, says it was Mr. W. E. Forster, about 1880 or 1881. And Mr. W. T. Stead was the interviewer.

"Mr. Stead interviewed Forster on his return from the East. Mr. Forster came to see me immediately after the interview appeared, and I reproached him for having countenanced such an abominable innovation from America. We had a long discussion, and in the end agreed that while the ordinary interview was not a thing to be encouraged, yet that the interview in which a man stated his views on some great topic of interest might be useful to the person interviewed and to the public generally."

Mr. Forster, however (says *Westminster Gazette*), was much blamed at the time for having submitted to being interviewed.

As the subject seems to be of some interest, Mr. Stead himself recalls, in the *English Review of Reviews*, the circumstances in which this first interview took place:

"Mr. Forster had just returned from a visit to Bulgaria. I called upon him, and after a long talk, I said I thought what he said was very interesting, and ought to be made known to the public, and asked for his permission to jot down what I remembered of his conversation, to publish it in the *Pall Mall Gazette*, offering at the same time to send him a proof. When I wrote out the interview, knowing the prejudice to which Sir Wemyss Reid referred, I did not venture to print it as an interview with Mr. W. E. Forster. I simply guarded his susceptibilities by describing him in the proof as 'an English public man who had recently returned from the East.'"

"When Mr. Forster got the proof, he returned it to me with a few corrections, striking out 'an English public man,' and putting in his own name. He said to me:

"Don't you think that the chief importance of my observations is that they are my observations, and therefore ought to be published in my name?"

"I said of course I thought so, but I never thought he would stand it, because there was such a prejudice against interviewing public men.

"Well," said Mr. Forster, "I understand that prejudice, but I think there are very great advantages for public men in the interview. It enables one, for instance, to air ideas or to send up a *ballon d'essai* without making one's self definitely responsible for them in the form in

which they are expressed. At the same time," he continued, "I think it is only right to the man interviewed that he should always have an opportunity of revising his interview in proof, on the strict understanding that the public should never be told that he had seen the proof. Otherwise, if he is known to have revised the proof, he is liable to be held to any statements therein contained almost as much as if he had written them with his own hand."

"There is much good sense in this; and, excepting where it has been absolutely impossible, I have always submitted proofs of interviews to the interviewed, and have never proclaimed the fact, unless with their permission, that the interview had been revised by its subject."

SWINBURNE ON DICKENS.

THE times indeed are changing when the *Quarterly Review* allows one of its contributors to sign his contribution. This novel departure for the *Quarterly* has been made in honor of Mr. Swinburne, who fills twenty pages of the July number with an appreciation of the work of Charles Dickens. It is interesting, but it possesses little of the charm of the best of Mr. Swinburne's prose and verse. Its interest, indeed, lies more in the judgments which he expresses than in the style in which his criticisms are couched. As usual, Mr. Swinburne is somewhat lavish in his laudation, but, contrary to his wont, he uses the lash but sparingly.

"THE CHILD'S HISTORY OF ENGLAND."

His severest censure is reserved for the "Child's History of England." He says:

"I cannot imagine what evil imp, for what inscrutable reason in the unjustifiable designs of a malevolent Providence, was ever permitted to suggest to him the perpetration of such a book."

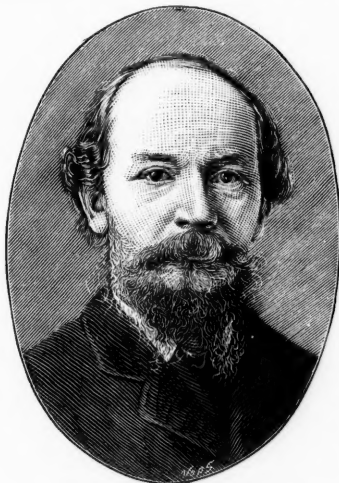
What ailed him in this book was its "cheap-jack radicalism." But Mr. Swinburne reserves his chief scorn for those who have adversely criticised Dickens. Those who deny truthfulness and realism to the imagination of genius of Dickens are "blatant boobies." "The incredible immensity of Dickens' creative power," he says, "sufficed for a fame great enough to deserve the applause and the thanksgiving of all men worthy to acclaim it, and the contempt of such a Triton of the minnows as Matthew Arnold."

This is nothing to what he says of George Henry Lewes, whose criticism provokes him to speak of the "chattering duncery and the impudent malignity of so consummate and pseudo-sophical a quack as George Henry Lewes. Not even such a past master in the noble science of

defamation could plausibly have dared to cite in support of his insolent and idiotic impeachment either the leading or the supplementary characters in 'A Tale of Two Cities.'

"DAVID COPPERFIELD" AND "GREAT EXPECTATIONS."

But Mr. Swinburne cannot stand Little Nell. "She is a monster as inhuman as a baby with two heads." He does not think very much of "Nicholas Nickleby;" he does not consider "The Old Curiosity Shop" in any way a good story; and he is not enthusiastic about "Dombey and Son." But of almost all the other novels he



ALGERNON CHARLES SWINBURNE.

has nothing but unstinted praise. Dickens' two best novels, Mr. Swinburne thinks, are "David Copperfield" and "Great Expectations." Of "David Copperfield" he says:

"From the first chapter to the last it is unmistakable by any eye above the level and beyond the insight of a beetle's as one of the masterpieces to which time can only add a new charm and an unimaginable value."

For the perfect excellence of this masterpiece he finds no words too strong. The story, he says, is incomparably finer than "Great Expectations." There can be none superior, if there be any equal to it, in the whole range of English fiction, except "Vanity Fair" and "The Newcomes," if even they may claim exception. There can surely be found no equal or nearly equal number of living and ever-living figures.

DICKENS' LAST GREAT WORK.

"Great Expectations" was Dickens' last great work. The defects in it are nearly as imper-

ceptible as spots on the sun or shadows on a sunlit sea.

"Barnaby Rudge" can hardly, in common justice, be said to fall short of the crowning phrase of being a faultless work of creation. In "Martin Chuzzlewit," that neglected and irregular masterpiece, his comic and his tragic genius rose now and then to the very highest pitch of all. Sairey Gamp has once again risen to the unimaginable supremacy of triumph by revealing the unspeakable perfection of Mrs. Quickly's eloquence at its best. He says:

"We acknowledge with infinite thanksgiving, of inexhaustible laughter and of rapturous admiration, the very greatest comic poet or creator that ever lived to make the life of other men more bright and more glad and more perfect than ever, without his beneficent influence, it possibly or imaginably could have been."

But Mr. Swinburne again and again returns to "David Copperfield," "which is perhaps the greatest gift bestowed on us by this magnificent and immortal benefactor."

PRAISE FOR "A TALE OF TWO CITIES."

"A Tale of Two Cities," he says, is the most ingenuously and inventively and dramatically constructed of all the master's works, but "Hard Times" is greater in moral and pathetic and humorous effect. Of "A Tale of Two Cities," Mr. Swinburne says that "this faultless work of tragic and creative art has nothing of the rich and various exuberance which makes of 'Barnaby Rudge' so marvelous an example of youthful genius in all the glowing growth of its bright and fiery April; but it has the classic and poetic symmetry of perfect execution and of perfect design."

Of "Little Dorrit," whom he describes as "Little Nell grown big," he says it contains many passages of unsurpassable excellence. "The fusion of humor and horror in the marvelous chapter which describes the day after the death of Mr. Merdle is comparable only with the kindred work of such creators as the authors of 'Les Misérables' and 'King Lear,' and nothing in the work of Balzac is newer and truer and more terrible than the relentless yet not unmerciful evolution of the central figure in the story."

DICKENS AND THACKERAY.

Comparing the posthumous fortune of Dickens and Thackeray, Mr. Swinburne says:

"Rivals they were not and could not be; comparison or preference of their respective work is a subject fit only to be debated by the energetic idleness of boyhood. In life Dickens was the more prosperous; Thackeray has had the better fortune after death."

RUSSIA IN MANCHURIA.

NOTWITHSTANDING Russia's formal evacuation of Manchuria, there are not wanting signs that the country will remain, commercially and industrially, to a great extent Russianized. A French traveler lately returned from that part of the world does not hesitate to call it Russian Manchuria. This traveler, M. Legras, records his impressions in the first July number of the *Revue des Deux Mondes*. M. Legras seems to have been allowed to go pretty much where he pleased, and the impression which his journey made upon him may be thus summarized. His first idea was that the Russians had been guilty of a capital mistake in leaving nearly three thousand kilometers of their great railway at the mercy of a population which has not submitted to them. It is true that they have accumulated troops, and have signed treaties stipulating for the protection of their interests, but at the same time it is not less true that they cannot be secured against a sudden cutting of the railway or against various attempts upon their interests. The Russians have run this risk for various reasons, of which the most important are two, the one commercial and the other political.

THE RAILROAD.

The Trans-Siberian Railway is a sort of hybrid ; in its origin, whatever may be the official version, it was a purely military line, and was planned in consequence of the warnings of various governor-generals of eastern Siberia, who had always made a great point of the danger which this unarmed Russian colony was running face to face with China, and destitute of quick communication with the capital. The belief in the commercial success of the enterprise was at first extremely small, so much so that the stations were placed at great distances from one another, and only at points where a fair amount of traffic might be reasonably expected. In spite of all, however, the traffic of the Trans-Siberian Railway grew and grew. The little stations had to be multiplied by two, and even then were not enough.

WILL RUSSIA MONOPOLIZE MANCHURIAN COMMERCE ?

M. Legras shows that the continuation of the Trans-Siberian Railway through Manchuria is really a sign of the pacific intentions of the Russian Government. He also makes it clear that the evacuation of Manchuria by the Russians does not extend to the railway, which will continue to be guarded by Russian troops. Russian occupation will continue to be a reality in the sense that Russia will proceed to develop the resources of the country in partnership, so to speak,

with native proprietors ; a method which secures to Russia the fruits of annexation without any of the responsibilities. It is this which will prevent Russia from permitting any commercial competition in Manchuria. The conditions under which the railway has been built were so contrived as to make it against the interest of China to grant concessions for railways without injuring her own interests, so M. Legras comes to the conclusion that Russia has nothing to fear in Manchuria so long as peace is maintained. Of course there is the risk of local troubles, and in the event of a general conflagration, such as he holds might result from the establishment of the Japanese in Korea, both the economic and the military situation would be threatened.

PIERRE LOTI'S TRAVELS IN INDIA.

M. PIERRE LOTI contributes to the second July number of the *Revue des Deux Mondes* a long and exquisitely written paper of his experiences in the territory of the Maharajah of Travancore. It was his privilege to see that delightful, intimate India, where the tourist does not penetrate, and he sings its praises in French so exquisite that to attempt to translate it seems almost a sacrilege. The great Indian temples, with their innumerable series of pillars, and their colossal statues of gods and goddesses, naturally make a profound impression upon this writer, so sensitive to beauty in all its forms.

JEWS AND CHRISTIANS UNDER BRAHMIN RULE.

Suddenly he sees in the shade of a banyan tree, near an ancient idol of Siva, a personage in a violet robe, with a long white beard, calmly sitting down reading. Actually it is a bishop, a Syrian bishop, but how strange to see him in this country of the mysteries of Brahmins ! Yet it is really perfectly natural, for the Maharajah of Travancore has about half a million Christian subjects. These do not represent the triumph of modern missionary effort ; their ancestors built Christian churches here in epochs when Europe herself was still pagan, for these assert that Christianity was brought here by St. Thomas, who came to India about the middle of the first century. It is, to say the least of it, more probable that they are descended from Nestorians who emigrated from Syria. Not less interesting is the fact that in the north of Travancore are to be found descendants of Jews who emigrated after the second destruction of the Temple at Jerusalem. It is pleasant to relate that under the benign rule of the Maharajah there are no religious feuds ; each religious community practices its faith in peace and toleration.

AN INTERVIEW WITH THE MAHARAJAH.

M. Loti has the seeing eye of the true traveler, and it is impossible to do more than mention a few of the scenes which aroused his interest and inspired his pen. He describes the remarkable Zoölogical Gardens at Trivandrum, where the fauna and flora of India are preserved under conditions absolutely similar to the undisturbed jungle. He visits the Maharajah himself, and rejoices that this prince has had the good taste to remain Indian, and not to assume the ugly Western dress. M. Loti was intrusted with the mission of presenting to his Highness a French decoration, and when he had discharged this duty he conversed with the Maharajah about Europe, which the prince is prevented from visiting by the strict rules of his caste. He also talked with the Maharajah on literary subjects, and found him a man of cultivated and refined intelligence. Some days afterward M. Loti was presented to the Maharanee; this is not the wife, but the maternal aunt of the Maharajah. In Travancore, names, titles, and property are inherited on the female side; indeed, in this state women have actually the privilege of repudiating their husbands at their pleasure.

THE FUTURE OF THEOLOGY.

UNDER the title of "Theology as a Science," Dr. Paul Carus contributes a very thoughtful article to the *Monist* for July. It is a very metaphysical article, and one the phraseology of which would be incomprehensible to the general reader. He believes that theology has a future, but he would prefer to call it theonomy, in order to differentiate it from theology, as astronomy is differentiated from astrology. This theology of the future is a new science, the roots of which lie partly in philosophy, partly in the scientific treatment of history, partly in ethics, partly in an application of art, and partly also in poetry and *belles-lettres*, the religious literature being, to a great extent, hymns and recitals. The basis of this theonomy is the same as that of theology, —namely, an appreciation of the factors that shape our ends; that is, God. The name of God, says Dr. Carus, remains quite as appropriate for the new conception of the eternal norm of being as it was for the old. Here is the theological definition of God:

"Moreover, the eternal norm of being is actually a harmonious totality of laws of nature, a system of truths, a spiritual organism, or a body of immaterial influences which condition all the details of becoming, and these creative factors of life are omnipresent as they are non material;

they are eternal as they are indelible; they are immutable as they are perfect, and beyond the possibility of being improved, forming the unchangeable bedrock and ultimate *raison d'être* of existence."

Theonomy is not merely philosophy; it is also based upon a study of the positive forms of historic religion. It is a grand and noble science, and the scope of its development is an infinite potentiality. Dr. Carus believes that the future will not be less religious, but more religious, and that our religion will be purer and nobler and truer. The horizon of religion is expanding, and when theology becomes theonomy the old orthodoxy is not surrendered, but fulfilled and completed.

THE WESTMINSTER STANDARDS.

Discussing the attitude of the theonomist to the creeds of the existing churches, Dr. Carus asks what may be done to meet the difficulties felt by the Presbyterians who recently attempted to revise the Westminster Confession of Faith. He answers the question by declaring that he would not revise the confession of faith, but would define it in such terms as to bestow the necessary liberty of conscience on Presbyterian ministers, without involving the change of a single letter in the Westminster Confession, and without causing a break in the historical tradition of the Church. A method by which he would effect this is to draw up the following preamble and resolution, which would be a substitute for the present declaration of adherence to the Presbyterian creed:

Whereas, divine revelation is the unfoldment of truth;

Whereas, God speaks to mankind at sundry times and in divers manners;

Whereas, Jesus Christ spoke to us in parables, and the Christian confessions of faith are, as their name implies, symbolical books;

Whereas, religion is a living power and life means growth;

Whereas, that is the true light which lighteth every man that cometh into the world; and, finally,

Whereas, centuries of unparalleled growth have added much to our better comprehension of religious truth;

Therefore, be it resolved that we, the duly elected representatives of the Presbyterian Church, declare—

That we regard the Westminster Confession of Faith and other formulations of belief in ages past contained in the symbolical books as venerable historical documents which were, from time to time, on certain occasions, and for specific purposes, composed by the legitimate and legally appointed representatives of our Church;

That we justify the spirit in which they were written, but deny that they were ever intended to bar out from us the light that the higher development of science and the general advance of civilization would bring;

That we bear in mind that the symbolical books are symbols, and that we have learned that a freer scope for their interpretation in the light of the maturest science of our age will do no harm to the essential doctrines of our faith.

Dr. Carus' paper is instinct with faith and remarkably conservative for so staunch a radical; but, as Dr. Carus says, "the very recognition of evolution as an essential truth in the interpretation of the development of man teaches me to be conservative."

THE FUNCTION OF WATER IN THE HUMAN BODY.

AN interesting, if somewhat technical, article on the functions of water in the human body is contributed to the July number of the *Deutsche Revue* by Prof. Karl B. Hofmann. Teleologically considered, the quantity of water in the body corresponds to its many functions, being greater than that of all other substances composing the body put together,—namely, two-thirds of its entire weight, or leaving out the skeleton, three-fourths of that of the soft parts and fluids, 55 per cent. falling to the share of the muscles alone. The amount, however, varies in the course of life, being much greater in early infancy, diminishing in the prime, and increasing again somewhat in old age. Some animals, as medusas and similar marine creatures, consist almost entirely of water, which constitutes 95 per cent. or even 99 per cent. of their substance. The functions of water are both physical and chemical.

PHYSICAL FUNCTIONS OF WATER.

"The flexibility of the spine depends on the intervertebrate elastic disks, which can absorb a great deal of water without losing their consistency; they also serve to soften the concussion that would otherwise be felt by the spine and the head, respectively, the brain, in walking, jumping, dancing, etc. It is a matter of common observation that a person who has been sick in bed for some weeks increases about $1\frac{1}{2}$ centimeters in height, since these disks have absorbed more water during that period of rest. . . . Not only the shape of the various tissues largely depends on their power of absorbing water, but also their physical qualities, that are most important in the performance of their functions, such as their toughness, elasticity, and power of resisting pressure and pull,—qualities that enable the arteries to bear the impact of the blood wave, and the minute capillaries to adjust themselves to changes of temperature by contraction or expansion. The water in the tissues prevents friction on close

contact. If muscles and ligatures contained little or no water, the movements of the limbs and locomotion of the body would be greatly restricted, if not impossible altogether. The suppleness of every single cell of tissue depends on inhibition.

CHEMICAL FUNCTIONS OF WATER.

"Chemically considered, water is either a solvent in which the chemical processes take place, or itself a substance that acts chemically. This function demands fullest recognition, since hundreds of chemical reactions, parallel with or crossing each other, accompany every expression of life, from simple muscular movements to the least stirrings of the soul. The sum total of these chemical processes, the 'transmutation of matter,' is impossible without the mediation of water. *Corpora non agunt nisi fluida* (bodies act only in a fluid state) is an old chemical maxim entirely applicable to our organism. But here water is all the more valuable as a solvent, since our body has no other solvents at command,—e.g., ether, alcohol, chloroform, etc.,—as used in the laboratory, aside from the fact that nearly all the substances in question are insoluble in those fluids.

HOW WATER ENTERS THE BODY.

"Most of the water is taken into the body in the food, solid as well as liquid, and in beverages. The Greek physicians argued the question whether water is a food or not. If the term 'food' is taken to mean substances that nourish the body and provide the motive power for its various functions, water cannot be classed among them. But if the term include all those substances without which chemical energy could not come into play, without which life must therefore cease, then water certainly is a food. Water, on entering the stomach, is probably not at all absorbed there, acting merely as a medium in which the chemical changes take place. If it were absorbed while still in the stomach, the digestive process could not be properly accomplished in the small intestines, where it is needed; but when that process is practically completed in the large intestines, the water, having fulfilled its task, is ready to enter the blood. Even a layman may gather from this how irrational it is to take large quantities of fluids, as soups or beverages, during meals, especially in case of sluggish digestion or enlargement of the stomach, as digestion is retarded if the digestive fluids are too much diluted. Water should be taken two or three hours after meals,—when, in fact, a feeling of thirst arises.

WATER IS A THERMO-REGULATOR.

A highly important function of water, finally, is that of regulating the temperature of the body, cooling it by evaporation from lungs and skin, and by perspiration. Bodily comfort depends on this regulation. Persons who do not perspire easily suffer more from heat. An increase over the normal temperature of 98 per cent. cannot be endured for any length of time. In high fever the bodily heat becomes unbearable on account of the disturbed regulation, and relief is experienced on perspiration. "We should appreciate the economic importance of water more," the writer concludes, "if it cost as much as the food we prepare in it. It is fully appreciated only by the traveler in the desert, who must carry it along for himself and his animal."

ALCOHOL AS FOOD OR POISON.

THE current discussion of the alcohol question among scientists is a most significant one to physiology, for it involves the question as to whether a substance may be both nutritious and poisonous in the same organ at the same time, and the answer gives light on two fundamental biological problems,—namely, the function of nutrition and the manner in which the injurious effects of poisons are brought about.

EXPERIMENTS ON DOGS.

An investigation reported by Professor Kassowitz, in the last number of the *Archiv für die gesammte Physiologie*, was carried out by means of experiments upon dogs, which were given definite amounts of food and required to do certain work each day. During periods of several days the weight of the dogs, and the amount of work done varied greatly, according to the alcoholic or non-alcoholic nature of the food given. The dogs were placed in a running machine, and the distance run by each dog was recorded.

During the first week the dog that was given food without alcohol ran 10.888 km. per hour, while its mate, kept on the same kind of food plus alcohol, ran only 7.847 km. per hour, and showed a loss of weight at the end of the week, while the first dog had gained in weight. During the following week the work was reduced on account of warm weather. The first dog ran 7.794 km. per hour, the second dog, supplied with alcohol, 6.901 km., and there was a difference of weight of 1,205 g., against the alcohol-fed dog.

A number of dogs were subjected to similar experiments, equal quantities of food being given to each dog, with alcohol in addition for one dog, and the experiments were kept up for several weeks in order to get at the true value of alcohol as a source of energy. The results were uniformly against the alcohol-fed dog, both as to the amount of work accomplished and changes in weight.

The author also cites results obtained by other investigators. Rosemann found from his own experiments that alcohol possesses no power of building up the albuminous substances of the body. Chanveau, in Paris, placed a 20 kg. dog in a running machine, and recorded the amount of work done when it was given alcohol and when it was not. The alcohol-free period lasted fifty-four days, during which time the dog was given 500 g. of raw meat and 252 g. of cane sugar daily. The dog ran two hours a day, and averaged 24 km. It was well at the end of the period, and had gained about one-fifteenth of its original weight. For the following twenty-seven days the food was unchanged, except that one-third of the sugar ration was replaced by alcohol. As a result, in spite of coaxing and whipping, the average distance run per day was 18.6 km., instead of 24 km., or about 21 per cent. less, and the dog had lost weight.

CONCLUSION: ALCOHOL NOT A NUTRITIVE SUBSTANCE.

The author believes that the idea of the nutritive value of alcohol comes from the supposition that a part of the food may be oxidized directly without first taking part in the building up of protoplasmic substance. He believes that no food material can be used in the body without first being converted into protoplasm. Since alcohol, as a stimulating and poisonous substance, destroys the highly complex and unstable protoplasmic molecule, it cannot at the same time be assimilated by it, consequently it cannot act as food and poison simultaneously.

After a short time alcohol paralyzes the center of innervation for the muscles, and therefore by diminishing the amount of muscular action, the secretion of carbonic acid is lessened. This diminished secretion, therefore, means no saving of the tissues of the body, but is a direct result of the poisonous action of alcohol. From all the evidence, it seems apparent that alcohol cannot serve for nutrition in any instance.



THE PERIODICALS REVIEWED.

THE CENTURY MAGAZINE.

THE *Century* for September begins with an account by James D. Hague of his personal experiences in "Our Tropical Islands." It may not be generally known that we have these islands in the mid-Pacific, and have had them for forty-five years. They are small, low islands, of coral formation, some of them with valuable deposits of phosphates. Some of them have now a further importance from the fact that the United States has become a Pacific power. Jarvis Island, for instance, lying nearly due south from Hawaii, is conveniently situated on the lines connecting the Pacific coast of the United States with Australia or New Zealand, and touching Hawaii and Samoa. The same thing is true of Baker's Island. Jarvis Island, which is typical of these little specks of dry land in the great Pacific, lies twenty-two miles south of the equator, is one or two miles long, and less than a mile wide, with an area of perhaps a thousand acres. Mr. Hague gives an interesting description of the equatorial birds found in great numbers around these islands, such as gannets, frigate-birds, tropic-birds, gulls, terns, and other species better known in northern latitudes.

A VISIT TO THE EMPRESS DOWAGER.

Belle V. Drake, in "A Visit to the Empress Dowager," gives a good picture of that notable little lady, and an account of the first New-Year's audience given by the Empress to the ladies of the diplomatic corps. The Empress Dowager served tea to her European guests first; she was attended by twenty-five princesses. "The Empress Dowager was dressed in the national costume, consisting of a long, loose, sack-like garment reaching from the neck to within about three inches of the floor, over which is worn a short, sleeveless jacket. They were made of blue satin exquisitely embroidered all over in figures of butterflies, bats, characters in gold denoting long life, and flowers, all in harmonizing colors. Her hair was dressed in the Manchurian extension fashion, and adorned with dozens of pearls, of varying sizes, from a penny down to a pinhead. Her feet were prettily dressed in the embroidered Manchurian shoes perched on brackets, so that she seemed taller than she really was, for she cannot be quite five feet tall. None of the ladies had small feet. The younger ladies wore differently colored gowns of the same style as the Empress', with large clusters of brightly colored flowers in their hair, and, with only a few exceptions in the case of widows, their faces were most artistically painted, a study in pink and white, with a single blood-red spot on the lower lip. The effect of this kaleidoscopic coloring can be better imagined than described."

THE LATE MR. GODKIN.

Mr. Joseph R. Bishop, in "Personal Recollections of E. L. Godkin," says of the late editor of the *Evening Post* that "if he was a pessimist, he was the most cheerful and the most delightful one that the world, at least my part of it, has ever known. If ever there was a life of intellectual freedom, it was the life that had him for its center and moving spirit." Mr. Robert T. Hill contributes "A Study of Pelée," from the experi-

ences of his trip to Martinique just after the destruction of St. Pierre; Prof. I. C. Russell writes on "Phases of the West Indian Eruptions," and gives the opinion that the immediate cause of death to the thousands in St. Pierre was the steam and the hot dust with it, and not burning gas; there is a study of William Watson, by Prof. George E. Woodberry, and an essay on betting, by President Arthur T. Hadley, of Yale University.

HARPER'S.

MR. T. E. BLAKELEY, writing in the September *Harper's* on "Macaulay's English," assumes that there is no dissenting voice to the opinion that "in Macaulay's 'History of England,' the English language has been written more clearly and correctly than in any great literary composition of the nineteenth century." "I spent," said Macaulay, speaking of his history, "nineteen days working over thirty octavo pages." Again he says, "In two years from the time I began writing I shall have more than finished the second part (vols. iii. and iv.), then I reckon a year for polishing, retouching, and printing." Each page as it was printed was again carefully revised and corrected. After all this toil; after the first four volumes were printed; after they had been received with a welcome more enthusiastic than had ever been given to any serious literary work; after fifty-six tons of vols. iii. and iv. had failed to meet the first demand in England; after the fiercest criticism had failed to lessen the popularity of the work; after the purity and clearness of the English had been universally recognized—he sat down to undertake a complete and thorough revision of the four volumes, making a thousand corrections in spelling, grammar, punctuation, the use of capitals, arrangement of words in sentences, omitting words in some places, inserting them in others, adding sentences and whole paragraphs, and making some alterations in small details."

AN ENLIGHTENED INDUSTRIAL ESTABLISHMENT.

Dr. Richard T. Ely follows up his economic study of the town of Pelzer, S. C., as one type of industrial establishments which seek a betterment of the wage earner's condition, with a sketch of the methods of a Cleveland establishment, the Sherwin-Williams Company, manufacturers of paints and varnishes. He describes the provisions for light, air, and cleanliness that have enabled men to work for years in a trade which formerly broke them down in a short time. Rest rooms are provided for the girls, and two floors of the building are devoted to lunch rooms, where wholesome meals are served at a very small cost. When night work is required, the company furnishes dinner at its own expense. Reading rooms are provided and furnished with books and periodicals; a monthly magazine is published by the company, and employees contribute to it. A mutual benefit association provides relief in cases of sickness or death, and more than nine-tenths of the employees belong to it. Dr. Ely thinks this establishment is typical of what is going forward in the most enlightened industrial centers of America.

This number of *Harper's* contains two remarkable

efforts of color illustration; the first, three bold-hued reproductions of Mr. E. A. Abbey's "Quest of the Holy Grail" pictures, is less successful than the delicately toned bits of seashore and sand dunes accompanying Sadakichi Hartmann's "A Reverie at the Seashore." The latter go far toward proving that colored pictures in magazines are worth while.

McCLURE'S MAGAZINE.

MR. L. A. COOLIDGE'S sketch of Attorney-General Knox, in the September *McClure's*, is quoted from in another department.

CUBA'S CHANCES FOR 15,000,000 POPULATION.

The magazine begins with a discussion of "Cuban Reciprocity—A Moral Issue," by William Allen White. Mr. White quotes General Wood to the effect that Cuba will easily sustain a population of 15,000,000, instead of the 1,500,000 people now on the island, and he expresses his own opinion that if the United States fulfills her obligations, and allows Cuban industries to thrive as they thrived under the McKinley Law of 1890, the population of the island will rise toward the 15,000,000 point rapidly. The increase must be largely American. The American population will make an American Cuba. The political alliance may come soon, or it may come late; but if the commercial alliance is made under the proposed reciprocity measure, the political alliance is inevitable. Mr. White thinks that even if a reduction in the tariff does reduce the price of sugar, "as the beet-sugar people wrongfully claim," it would be better to save each American householder a few dollars a year on his sugar bill than to continue protecting an industry like beet sugar, which, according to the prospectus issued by the Oxnard beet-sugar people, is making nearly 100 per cent. profit on its investment.

STUDENTS OF THE MARTINIQUE DISASTER.

There is an excellent article on "Pelée, the Destroyer," by Mr. August F. Jaccaci, who, in company with George Varian, the artist, and Mr. George Kennan, were the first to establish headquarters and live under the shadow of the volcano as soon as they could get to Martinique after the news of the great eruption of May 8 came. During their stay they explored the mountain on all sides, witnessing the various phenomena of several eruptions, from the last of which they narrowly escaped. Mr. Jaccaci's description is illustrated with the drawings of Mr. Varian from sketches that artist made on the spot.

There is a further chapter of Miss Ellen M. Stone's account of her captivity among Bulgarian brigands, a second installment of Santos-Dumont's history of his aeronautic experiences, and several contributions of fiction and verse.

SCRIBNER'S.

MR. WALTER A. WYCKOFF, whose descriptions of personal experiences among "The Workers" of America attracted so much attention in *Scribner's Magazine*, has been studying London laborers at first hand, and contributes to the September number an article on "London Wage Earners." He concludes that Great Britain is to-day exceedingly prosperous. "I venture to say that not since the fifteenth century has the prosperity of England been more generally shared among her working classes.

The unemployed—except the unemployable—have disappeared, absorbed by the increased demand for labor in both town and country industries; while for the great body of wage earners, one has but to see them as they live and work by hundreds of thousands in East London in order to realize how hardy and well nourished and well clothed and well schooled a race they are, and how decisively skilled—forming, as I think, an industrial army of rare efficiency."

DINING WITH THE KING OF KINGS.

"Through the Country of the King of Kings" is a travel sketch of Abyssinia by W. F. Whitehouse, who describes with interesting detail a banquet given by Menelik, "King of Kings and Conquering Lion of Judah." "The Negus seated himself on the throne, which was surrounded by court officials and attendants. At his right lay a large pile of flat bread, on a table covered with a white cloth, and decorated with flowers. On either side of the dais, which was curtained off from the rest of the hall by thin, flowery-patterned chintz, stood two silver candelabra, eight feet high, holding sixteen lighted colored tapers. The guests, consisting of the various residents and ourselves, were placed at two tables on the Emperor's left, set with massive silver knives and forks, marked with the imperial M. While we ate our well-cooked dinner of many courses, a number of dishes were carried to the Negus. Of some he partook; others, merely touching, he sent to the chief officers sitting about him. Before each of these groups stood an attendant holding up a great piece of raw beef, killed that morning, from which the guests cut strips with a sharp knife, and placing one end in the mouth, cut off the remainder. Each person had a decanter of honey-beer by his side."

Mr. L. E. Fournier describes, in "Prix de Rome Students at the Villa Medici," the life of the prize students in art, sent each year by France to Rome, to study at the Villa Medici. Mr. R. H. Davis concludes his serial story, "Captain Macklin," and there is a second installment of Mr. James M. Barrie's "The Little White Bird," a tale of London life in which the author of "The Little Minister" has renounced dialect.

THE COSMOPOLITAN.

AN unusually interesting group of sketches of "Captains of Industry" appears in the September *Cosmopolitan*, brief articles on John W. Gates, H. H. Rogers, Sir Hiram Maxim, John H. Patterson, of Dayton Cash Register fame; Charles R. Flint, "the father of trusts," and John Arbuckle, the canny Scotch opponent of the Sugar "Trust." Mr. Samuel E. Moffett, in his sketch of John Arbuckle, shows how the mighty fight between coffee dealers and sugar dealers originated in the refusal of the Sugar Trust to sell sugar for sweetened coffee to the Arbuckles except at list prices. "The Arbuckles delivered an ultimatum, 'Give us fair terms or we will go into the sugar business on our own account.' 'There seems to be money in roasting coffee—we may try it;' responded Havemeyer. The war was on." Mr. Moffett says that up to 1900, when a territorial agreement was arrived at, the war had cost the belligerents some twenty-five million dollars.

THE GROWTH OF TUSKEGEE.

Mr. Booker T. Washington discusses some "Problems in Education" in an account of the small beginnings

and the splendid development at Tuskegee. He says: "We began teaching agriculture in 1882 with one hoe and one blind horse. At the present time the school cultivates by the labor of the students seven hundred acres of land, and grows a large part of the food consumed by the one thousand four hundred students, instructors and families, upon the grounds."

THE SIMPLE TASTES OF THE CZAR.

Mr. Fritz Morris describes the very simple home life of the Czar of all the Russias and his family. The Czarina dresses like an English lady, and the Czar, too, dresses in a simple Russian costume in the palace. He rises at 8, and his toilet lasts until nearly 9 o'clock, when he sits down at his writing table to discharge such important matters of state as do not admit of delay. From 10 until 11 o'clock he enjoys a short rest, during which he partakes of luncheon, and then the time is again devoted to work,—to the signing of documents, to the study of bills and the reports of the ministers and governors, to which he adds numerous marginal remarks. From 1 to 4 is devoted to the family, and from 4 to 6 or 7, work again. The dinner is extremely simple, and the Czar abhors banquets.

MUNSEY'S.

UNDER the title "A City of the Plains," Mr. Grover Townsend writes in the September *Munsey's* about "Zion City," the creation of John Alexander Dowie and his religious followers. Mr. Townsend thinks Dowie will be reckoned among the great organizers of the world; he has founded on the shores of Lake Michigan a city designed to house a million people,—intended by its founder to be a world capital. "To provide the means of expansion, Dowie exacted a tax of one-tenth of the income of all those who accepted his direction. With the sum thus gained he purchased some ten square miles of territory on the shore of Lake Michigan, forty-two miles north of Chicago and the same distance south of Milwaukee. There he planned his City of Zion, and there within the last six months he has settled ten thousand people. Just as in Washington the city radiates from the Capitol, so in Zion the center will be a great white marble temple. From this as a hub, boulevards will spray outward as the spokes of a wheel. Each boulevard will be 300 feet in width, with a central rib of parkway filling one-third of the space. Connecting these main arteries will be the avenues, each one 150 feet wide."

Anne O'Hagan tells, in "The Rescue of the Submerged," of the work of the Children's Aid Society in helping the waifs of the city slums. She thinks the most convincing proof of the admirable results of this system is the fact that of the nearly 23,000 children placed in families, only 60 have been arrested and sent to reform schools. The majority became farmers or farmers' wives. Two have become governors of States, 1 a member of Congress, 26 bankers, 34 are lawyers, 17 physicians, 14 journalists, 19 clergymen, and 956 entered the army.

H. Stanley Todd gives a series of thumb-nail sketches of "The Giant Artists of France;" Carl Hackett shows the remarkable development of the transport service in "How the Soldier Goes to War," and F. S. Arnett celebrates the semi-centennial of the first production of "Uncle Tom's Cabin" with an account of the most

popular actors who have "starred" in that drama since it was first produced at the National Theater, New York, on August 23, 1852.

THE WORLD'S WORK.

JOSEPH BLETHEN takes "A Typical Irrigated Community," and shows, in the September *World's Work*, how the farmer bought his land and developed it, and the profit made, and the town which resulted from the aggregation of the irrigating farmers,—thus studying the irrigation question in the light of results. The farmer who goes into an irrigated district has to pay about \$60 an acre, part down, and the balance in five annual payments, at 7 per cent. This includes a water right to his acres, and instead of a water rent he does his share of work every year in repairing and cleaning the ditch. Of a twenty-acre farm, half is marked off to go into alfalfa, which is the staple of all irrigation ranches. Five of these ten acres are devoted to pasturage, and five for cutting. A half-acre is laid off for an orchard for home use, and the balance of the twenty acres is marked off to go into potatoes, peas, onions, and melons, the best crops for a first-year venture. Mr. Blethen pictures his farmer as making \$1,000 besides his living in the second year, and making the last payment on his farm in the third year.

BREEDING NEW KINDS OF CORN.

Another article of interest to farmers is Mr. W. S. Harwood's account of the successful experiments in "Breeding New Kinds of Corn," whereby the crop has been increased many millions' worth on the same acreage. At the Agricultural College at Urbana, Ill., Professor Hopkins and his assistants have been recreating the corn plant. They have developed a species for man, another one for animals, and a third for manufacture. They have increased the quantity of protein and the quantity of oil in the grain, and when needed, they have curtailed the supply of oil to give some other element more room. They have told the ear to change its form, so that it should be longer or shorter, or leaner or plumper. They have told the corn plant to increase in height and to decrease in height, and they have even told it that it must weave its leaves on a wider and larger pattern."

OTHER ARTICLES OF INTEREST.

A New York clergyman makes a study of the "stranded" portions of our population, and analyzes the different types of broken down and unfortunate and fraudulent that seek advice or money; in "The Highest of All Railroads," Mr. E. C. Rost tells of the engineering problems of the Oroya Railroad in Peru, which leaves the hot tropics eight degrees south of the equator at 8 o'clock in the morning, and arrives up among perpetual snow and glaciers at 4 o'clock in the afternoon of the same day; Mr. C. H. Matson, in "World-Wide Lessons from Kansas Farms," shows how the agricultural experience of a single State has helped farmers all over the earth by the intelligent use made of it by the Secretary of the State Board of Agriculture, Mr. F. D. Coburn; Russell Doubleday traces the great growth of the correspondence school business, and estimates the value of its opportunities for special training in practical studies; another article deals with New Jersey as the "Home of Trusts," showing the workings of the law that has enticed most of the great corporate organiza-

tions to that State; William Bulfin writes on "The United States in Latin America," and Albert B. Paine studies the United States in the course of a journey "By Trolley from New York to Chicago."

EVERYBODY'S MAGAZINE.

MR. FRANK NORRIS, the novelist, has been commissioned by *Everybody's Magazine* to visit the territory affected by the coal strike, to give an accurate idea of the conditions of living in the representative mining towns. In the September number of *Everybody's*, Mr. Norris gives the result of his investigations. Mr. Norris says that a great many of the miners have gone away; that nearly 30,000 have left the anthracite district. Some have gone to work on farms, some have turned tramps, and nearly 15,000 have gone back to the old country. As to the wages of miners and the conditions of their life, Mr. Norris found very different conditions in different districts. In the Wilkesbarre district he finds the miners frequently not only owning their houses, but sometimes owning two or three in addition, which they rent to other workmen. He finds that many men in this district earn \$150 a month, with seven hours of drilling per day. They get free medical treatment in case of accident, fuel during the winter at a price ridiculously small, a good home free of mortgage, and steady work. But in Melonsville, a mining settlement three miles from Hazleton, \$50 a month is a good figure, and the Polanders live in houses built of sheet iron and boards, about fifteen feet square, sunk about three feet in the ground. There is but one room, and in this room the family,—anywhere from six to ten humans,—cooks, eats, and sleeps. The miners here complain that it is impossible for them to earn more, because the company will not give them more.

MR. BALFOUR'S VIRTUES.

There is an attractively illustrated character sketch of "England's New Prime Minister," by T. P. O'Connor, who has a good deal to say about Mr. Balfour's "detachment" from the life around him. Apart from this, Mr. O'Connor admits that in many ways no man's leadership could be more successful than that of Mr. Balfour. "He has a sweet and pleasant temper, a judicious mind, a tolerant disposition. He desires so far as he can to be at peace with all men. The result is that he is courtesy itself, that his word is accepted with implicit reliance by opponent as well as friend, and that he is the most popular man, personally, in the whole House of Commons."

FRANK LESLIE'S.

THE recently exposed Humbert swindle, "the most successful as well as the most fantastic fraud in business history," is traced by Mr. E. P. Lyle, Jr., in the September *Frank Leslie's*. Therèse Daurignac, wife of Frédéric Humbert, was an obscure peasant girl. Her feat was, in brief, that she declared herself worth twenty-four millions of dollars, and kept on declaring it until hard-headed bankers and merchants were willing to lend her ten millions in cash, and enabled her to live in luxury for eighteen years.

Frederick Street clears up the question of "Lightning" as it affects the average observer of summer thunderstorms. These vary in number in different

parts of the country. The middle Atlantic States show the greatest number of deaths from lightning, with an annual average of eleven fatalities for every million inhabitants, but the Mississippi and Missouri valleys and Florida have more thunderstorms.

"The general rules for personal safety in a storm are to avoid standing under or near trees, in the doorways or open windows of buildings, close to cattle or near chimneys or fireplaces. When a person has been struck by lightning, and becomes unconscious, the attempt to revive them should be begun without an instant's delay. Respiration and circulation should be stimulated by warming the body with flannels, and by making the injured person breathe artificially. People have often been revived after being apparently without life for more than an hour."

Cuyler Smith begins the number with an article on "The American Negro," attractively illustrated with photographs of the old-fashioned kind of darkeys we all like to see and know.

THE ATLANTIC MONTHLY.

IN the September number of the *Atlantic Monthly*, Mr. W. E. B. Du Bois, writing "Of the Training of Black Men," makes a somewhat impatient appeal for the higher education of the negro. He thinks the fact that only 2,000 negroes have gone forth from schools with the bachelor's degree is a sufficient refutation of the argument that too large a proportion of negroes are receiving high training. Five times as many as these would only reach the average of the country, counting the ratio to population of all negro students throughout the land. "Four hundred negroes in addition have received the bachelor's degree from Oberlin, Harvard, Yale, and seventy other leading colleges." Mr. Du Bois cites the investigations of the Atlanta University Conference into the future of these negro graduates. Two-thirds answered the inquiries, showing that 53 per cent. of the graduates were teachers, 17 per cent. clergymen, 17 per cent. in the professions, 6 per cent. merchants, farmers, and artisans, and 4 per cent. in the Government civil service. Mr. Du Bois thinks this is a record of usefulness that goes far to prove that culture is not thrown away on the negro.

A CLEARING-HOUSE UNIVERSITY.

Mr. H. W. Horwill advocates "A National Standard in Higher Education." This he proposes to obtain by the creation of a new university or degree-giving body. He admits that there are already too many universities in America. "That is the reason why one more is urgently needed. The greater the number of banks in the city, the more necessary is a clearing house. It is the multiplicity, not the paucity, of magazines that has brought into existence a REVIEW OF REVIEWS."

Mr. Horwill's "clearing house" university would have a senate composed of a board of experts to draw up a curriculum for degrees, and appoint examiners. Mr. Horwill proceeds to elaborate the plan of his university; its examinations would be open to any one, whether educated at college or out of it, of any sex, race, or creed. There would be no conditions. The candidate would be judged by examinations alone. No degree or certificate would be recognized as giving exemption from any examination. No honorary degrees would be conferred. The university would have its offices in the national capital, with examinations

conducted simultaneously at a large number of centers throughout the country. Mr. Horwill claims that this would provide new opportunities for ambitious youths of narrow means, that it would furnish an intelligible standard of proficiency in the case of graduates seeking posts as teachers, as the certificates of this national university would make it possible to compare the scholarship of men coming from every part of the country, and would give the smaller colleges a chance.

OTHER ARTICLES.

Vida D. Scudder contributes an essay on "Democracy and Society," there is some interesting "Correspondence Between Henry Thoreau and Isaac Hecker," and an account of "What Public Libraries are Doing for Children," by H. C. Wellman. We have quoted in another department of the REVIEW of REVIEWS from Mr. Talcott Williams' article on "The New Navy," and Mr. Charles M. Harger's on "The Kansas of To-day."

THE NORTH AMERICAN REVIEW.

THE August number of the *North American Review* opens with an article by Senator Platt, of Connecticut, author of the famous "Platt Amendment," on "Cuba's Claim Upon the United States." Senator Platt is optimistic enough to hope for a complete reversal of the attitude taken by Congress at the last session on the subject of tariff concessions, as soon as public sentiment on this question is clearly ascertained. The country, Senator Platt believes, is fully in accord with President Roosevelt. The utterances of Republican conventions in some of the very States where opposition to reciprocity was supposed to be strongest may be taken as evidence that the public conscience has been aroused.

LORD SALISBURY AS FOREIGN SECRETARY.

Mr. Sydney Brooks, reviewing the public record of Lord Salisbury, says of his administration of the British Foreign Office:

"Lord Salisbury's talent for sweeping aside irrelevant details and holding fast to the few central facts was never perhaps seen more clearly than in his Chinese policy. The future will do justice to that, just as we of the present day do justice to his handling of British interests in Africa,—Zanzibar, Uganda, Mashonaland, the reconquest of the Soudan, the safeguarding of the Nile and Niger, and the quietus placed on foreign interference in South Africa are monuments enough for one man,—to his masterly rescue of Crete, and his attitude during the Spanish-American war. So quietly and with so complete an absence of self-advertisement were these triumphs accomplished that people hardly realized Lord Salisbury's share in them. They came, indeed, to look upon him rather as a force than a personality, as a something in the background,—very cool and unhurried, and grim and wise,—that managed somehow to direct the foreign affairs of the country with dignity and credit."

A BRITISH IMPERIAL ZOLLVEREIN.

The Hon. John Charlton, a member of the Canadian Parliament and of the Anglo-American Joint High Commission, writes on "British Preferential Trade and Imperial Defense." The analysis of Great Britain's import and export trade returns for the year 1901, presented by Mr. Charlton, suffices to show why the zollverein proposition has thus far failed to commend itself to British statesmen. It appears from these returns

that the percentage of total exports to Canada in 1901 was $2\frac{1}{2}$ per cent., and to all British possessions and protectorates $32\frac{1}{2}$ per cent. Since absolute free trade with Canada would not be likely to more than double her proportion of exports, while free trade with all the colonial possessions would not be likely to increase their trade to more than 50 per cent. of the total amount, Mr. Charlton concludes that England will hesitate long before endangering what is now $67\frac{1}{2}$ per cent. of her total export trade by entering into any preferential arrangement with her colonies.

SECURITY FOR OCEAN TRAVELERS.

Admiral Melville of the navy advocates legal enactments to compel all ocean steamships carrying passengers to be equipped with twin screws and double hulls. He shows that many advantages from an engineering point of view accompany these improvements in construction, and that the economic gains resulting therefrom far more than offset the increased expenditure.

A TRAVELER FROM CARNEGIA.

Mr. Howells' Altrurian now has a worthy companion in the person of a gentleman from Carnegie, who is introduced to the *North American* readers by Mr. James Raymond Perry. Through Mr. Perry this Carnegian tells us that his country "took its name from a Scotchman, who, early in the century, was much interested in matters pertaining to the welfare of humanity. He was a man of very great wealth; and after retiring from active business affairs, he gradually gave away his many millions, founding institutions of learning and culture. In his later years he gave expression to the sentiment that 'It is a disgrace for a man to die rich.' His theory, as we in our country understand it, was that the nominal owner of wealth is not the actual owner, but merely the trustee of the property in his actual possession."

The Carnegians, in founding their state, determined that all men and women should be aided "to escape the disgrace into which their greed and selfishness might otherwise plunge them." Their constitution, framed in some of its articles on the constitution of Altruria, provides that no native-born man or woman, after reaching the age of sixty years, shall be protected by the state in his or her property rights. All the property of such persons is relinquished to the state. Persons on reaching the age of sixty are enrolled as Honored Citizens and are supported by the state for the remainder of their natural lives.

AMERICAN INFLUENCE IN THE WEST INDIES.

Dr. L. S. Rowe, chairman of the Insular Commission to Revise the Laws of Porto Rico, contributes an instructive paper on "The Extension of American Influence in the West Indies." Dr. Rowe is especially severe in his strictures on those American residents in Porto Rico in whose eyes "the entire system of law and government, of domestic and public institutions, was bad simply because it was different from our own." Dr. Rowe says that the lawyers were the chief sinners in this respect. When it became necessary to revise the legal system of Porto Rico, "the lawyer from Massachusetts wanted the Massachusetts system, the lawyer from South Carolina the South Carolina system, and so on. The fact that one of the prosperous States of the Union [Louisiana] is living under a civil law closely approaching the Spanish system was given no weight."

OTHER ARTICLES.

The Comte de Soissons contributes a criticism of Sienkiewicz; Prince Alfonzo de Bourbon describes his efforts in Europe to abolish duelling; the Hon. L. H. Courtney, M.P., and the Hon. Alfred Lyttelton, M.P., discuss the South African situation; Mrs. Gertrude Atherton describes her researches in the West Indies which led to the disclosure of facts regarding the mother of Alexander Hamilton, some of which are set forth in Mrs. Atherton's book, "The Conqueror."

GUNTON'S MAGAZINE.

THE leading editorial articles in *Guntton's* for August present "The Need of a Strong Opposition Party" and the anti-administration side of the Cuban reciprocity question.

Among the contributed articles Mr. Henry White's discussion of "Machinery and Labor" is deserving of special attention, giving as it does a temperate and well-considered statement of the part played by machinery in modern industrial life and the relations which it sustains to the general labor movement.

WHERE ORGANIZED LABOR HAS PROFITED BY MACHINERY.

Mr. White directs our attention to one instance in which machinery was almost immediately recognized by the laborers themselves as a boon:

"The typographical union is a notable example of a union which has accepted a revolutionizing invention as being inevitable, and thus succeeded in securing a rate of wages for the operators considerably in excess of that received by the hand compositors. An officer of the New York union estimates that each linotype machine introduced into the newspaper offices displaced three men, and that within three years, owing to the increase in the size of the newspapers and the larger demand for printed matter which it encouraged, the men laid off have been reemployed, and that to-day the pay rolls even exceed the former figure. This machine has also had the effect of elevating the standards of the craft, owing to the higher skill and education required. The competition among the employers is such that profits are reduced to a minimum, the public therefore receiving the full benefit of the improvement."

COTTON MANUFACTURING, NORTH AND SOUTH.

Mr. Henry G. Kittredge presents some of the results of the twelfth census regarding the progress of the cotton manufacturing industry in the Northern and Southern States within the decade, 1890-1900. In the North the principal change in the industry during the decade was in the direction of installing new and costly equipment for the manufacture of the finer grades of cotton, while the manufacture of the coarser fabrics has been largely relegated to the South. In the whole country there was an increase of nearly 5,000,000 spindles in the ten years. About 56 per cent. of this increase was in the South and 44 per cent. in the North. In the North, over 90 per cent. of the gain was in Massachusetts alone, while about 83 per cent. of the South's gain was in the States of North Carolina, South Carolina, and Georgia. The social conditions of factory employees in the cotton mills of the South have apparently improved since 1890, but the proportion of children among the wage earners was as great in 1900 as in 1890, or from 23 to 27 per cent., against 4 to 10 per cent. in New England.

THE NINETEENTH CENTURY AND AFTER.

THE *Nineteenth Century* for August opens with a sonnet by Mr. Swinburne on the centenary of Alexandre Dumas. It reminds us more of the earlier Swinburne than most of his recent work. We quote four lines:

Man of men by right divine of boyhood everlasting,
France incarnate, France immortal in her deathless boy,
Brighter birthday never shone than thine on earth, forecasting
More of strenuous mirth in manhood, more of manful joy.

MR. FREDERICK GREENWOOD ON BRITISH EDUCATION.

In an article entitled "What Have We Gained by Education so Far?" Mr. Frederick Greenwood expresses his opinion that England has gained very little by education at a very great cost. He harks back to what he considers was Mr. Forster's early ideal, which he thus describes:

"All education in the 'three R's,' carried out thoroughly in every branch, but especially in the first (so as to impart a full acquaintance with the English tongue), would have amounted to quite as much as is retained after leaving school, in nine cases out of ten. Add to this a system of reading for the purpose of stimulating curiosity or nursing a natural bent, and it would be for most children a better education than they get now. Under such a scheme the voluntary schools would have been carried on quietly and sufficiently, and with what avoidance of contention! Millions of money raised in discontent, and spent in disappointment and waste, might have found profitable application—even for educational purposes, though of another kind."

THE FUTURE OF RUSSIA.

M. A. de Bilinski predicts that Russia is going to eat up all Europe, as well as Asia.

"The picture of the ultimate destiny of Russia must show her in the rôle of mistress of Asia and Europe, unified under the action of the Slav heaven. Russia is bound to attain extraordinary greatness, not only through the internal development of her existing empire, but through further expansion. Her dominion, in any case, representing that of the whole Slav race, will stretch from the Arctic and North seas to the Persian Gulf and the Mediterranean, and from the Pacific to the Adriatic and the Oder."

The other nations can hardly be expected to enjoy such a prospect, and therefore M. de Bilinski thinks:

"A coalition may be formed to hold the Titan in check. There would be three partners in this combination: the Chinese, the Latin, and, of course, the German federations."

TURKISH RULE EAST OF JORDAN.

Miss Gertrude Lowthian Bell contributes a very interesting article upon a very little-known subject. She has been traveling on the other side of Jordan, through which the great pilgrim road passes to Mecca, and which is important politically on account of its connection with the English occupation of Egypt. In this vast territory she finds that the moribund Ottoman Empire has experienced a renewal of vigorous existence, which is one of the by-products of the Russo-Turkish War:

"The axis of the Sultan's authority over the whole district is to be found in the rapid growth and unrivaled prosperity of the Circassian settlements. Flying from the Caucasus before the invading Russian, the Circas-

sians have been settled in various parts of Turkey in Asia. Rapacious, cruel, industrious, and courageous, they are by nature a ruling race. They will turn the idle and ignorant Bedouin into servants, or drive them eastward into the desert, and they will rule them with a rod of iron, and hold them in check with a relentless persistency, against which they are powerless. They are a sharp sword in the hands of the Sultan, the defenders of Islam in the east of Jordan. Turn to the southern of the three imaginary divisions, and you shall find the Circassian supreme over the land; from the governor down to the common soldier, the ruling class is almost entirely drawn from them. They are a scourge and a terror to the inhabitants, yet it cannot be denied that, on the whole, they make for order. The Christian population suffers acutely at their hands."

A MOTOR WAY THROUGH ENGLAND.

Mr. B. H. Thwaite suggests "that a special cycle way should be constructed, as direct as possible, from London, through the center of England, as far as Carlisle, from which it could be continued to Glasgow or Edinburgh, if not to Inverness. The surface of the cycle or motor-car way to be formed by means of specially hard creosoted wood blocks with asphalt joints. Compared with a railway, the cost of permanent-way construction would be trifling. The questions of gradients, embankments, bridges, tunnels, curves, are comparatively trivial, because, although this motor-car or cycle way would probably be used for freight traffic, the light weight of such cars, compared to a locomotive and railway train, would permit a very light form of bridge construction to be used. The author has already calculated that a small annual fee of 2s. 6d. from all the members of the cycle unions and clubs in Great Britain would go a long way toward financially justifying the construction of such a cycle way."

HOW TO CONTROL WAR CORRESPONDENTS.

Mr. Perceval Landon suggests that future war correspondents of newspapers should be dealt with in a more scientific manner than they were in South Africa. His first suggestion toward the improvement of the existing situation is that:

"(1) Lists shall be kept at the War Office (A) of newspapers which shall be permitted to have representatives at the front, and (B) of those men (a) who have satisfied the office of their capacity and trustworthiness, and (b) of those who wish to be included in list (a), and will be so included after inquiry has been made as to their fitness."

The right to have a correspondent at the front would be withdrawn from "any newspaper which shall have published at home harmful letters or other information from the seat of war, whether such information be proved to have been sent by its official representative or not."

OTHER ARTICLES.

Mr. Cecil Hallett describes the last resting-place of England's Angevin kings at Fontevault, in the southern border of Anjou.

Mr. C. L. Eastlake writes a paper on "Modern Critics of Old Masters," from Reynolds and Ruskin downward.

Mr. W. T. Fletcher has a very interesting account of the evolution of the warship, under the title of "The *Æsthetics of Naval Architecture*."

There is a pleasant gossiping paper by the late Dr.

George Fleming on the folklore of horses and horse-shoeing.

Mr. H. Hamilton Fyfe and Mr. W. F. Lord wrangle with each other on the subject of the censorship of plays, and the recent action of the censor in the case of "Monna Vanna."

THE CONTEMPORARY REVIEW.

MR. J. A. SPENDER writes, in the August *Contemporary*, on "The Liberal Party—Past and Future." He recognizes as a crowning mercy that the Liberal party has come through these bad years of the war without a definite split between imperialist and other groups. Whoever aspires to lead the Liberal party must aspire to lead the whole of it. It is proved that if war divides Liberals, it brings with it a number of issues which unite them. Those who said that the old Liberalism was dead had assumed that the old Toryism was dead. Manifestly that was untrue of legislation, and it will probably also be untrue of administration. As to Home Rule, he says if English Liberals treat the Irish frankly, and assume them to possess some degree of common sense, they will probably discover that the Irish are quite as much alive to the difficulties of the situation as the English are themselves. On the other hand, the Liberal leader who will let opponents secure the British vote on the allegation that the union is in danger, and the Irish vote on the ground that the Liberals had recanted Home Rule, would not be displaying a genius for political management.

THE ECONOMIC TAPROOT OF IMPERIALISM.

Mr. J. A. Hobson, in one of those thoughtful essays on economic questions which he occasionally contributes to the periodical press, discusses the economic cause of which imperialism is the outward and visible fruit. He says:

"It is idle to attack imperialism or militarism as political expedients or policies unless the axe is laid at the economic root of the tree, and the classes for whose interest imperialism works are shorn of the surplus revenues which seek this outlet. The struggle for markets, the greater eagerness of producers to sell than of consumers to buy, is the crowning proof of a false economy of distribution. Imperialism is the fruit of this false economy; social reform is its remedy. The primary purpose of social reform, using the term in its economic signification, is to raise the wholesome standard of private and public consumption for a nation so as to enable the nation to keep up to its highest standard of production. Trade unionism and socialism are thus the natural enemies of imperialism, for they take away from the 'imperialist' classes the surplus incomes which form the economic stimulus of imperialism. Everywhere the issue of quantitative *versus* qualitative growth comes up. This is the ultimate issue of empire."

SCIENCE AND IMMORTALITY.

Miss Emma Marie Caillard, discussing the question of immortality from the scientific standpoint, argues strenuously and well against "the false assumption that there is a scientific presumption against the persistence of individual life after death so strong that a greater weight of evidence should be demanded than would be necessary before it can be accepted as proved." She maintains that, apart from the evidence of apparitions and the like:

"From the scientific standpoint we can claim a presumption in favor of the persistence of human individual life after death, a presumption founded on the prominent place of individuality in Nature, and its presence in so high a degree in man that actual conditions are insufficient to give it scope. The body of a bird or of any animal does not strike us as limiting its individuality, rather as expressing it in a most complete and appropriate manner. The individuality of many a human being, on the contrary, seems to be fighting its way to expression through bodily hindrances, rather than clothing itself in a suitable and controllable form."

She also suggests that telepathy, which is known to exist between living beings, while still in the body, might enable communication to be established between the disembodied and those whose physical life still continues.

IN DISPRAISE OF THE ROMANS.

Mr. A. M. Stevens, in an article entitled "Prevalent Illusions on Roman History," says some plain truths concerning the character of the Romans, which are calculated somewhat to disturb the glamour that is thrown over ancient Rome by the mist of history and of song. He says:

"The nobles were a parcel of crafty intriguers who made and administered the laws with a view solely to their own interest and aggrandizement. In the Roman senate every man had his price. The love of gold was the sordid spring of the most brilliant enterprises of the republic. In this verdict history is unanimous. The plebeians have very little more claim upon our consideration, for a more contemptible pack of rascals never sullied the pages of history. The body politic was clogged and hampered by a horde of frivolous and irresponsible citizens, hopelessly abandoned to ease and amusement."

Below the plebeians were myriads of slaves, who bodily and mentally were equal to their masters, but who had no human rights, and were tortured, murdered, and outraged at will. In war the Romans were past masters in methods of barbarism. Their constant study was what Gibbon calls "the art of destroying the human species."

"Their voracious appetites refused to be satisfied by war and conquest, for a political opponent was invariably regarded as an enemy and pursued with bloody and implacable ferocity."

THE FUTURE OF THEOLOGY.

Mr. Samuel McComb, in an article entitled "Do We Need Dogma?" writes very hopefully concerning the future of theology. He says:

"Historical criticism, too, which has done so much to purge theology of accidental accretions, has also contributed very materially to its substance and strength. Agnostic despair of history is no longer possible. Professor Harnack being witness, the fire of the most stringent criticism has failed to dissolve such facts as these: (1) that Jesus claimed to be the Messiah, the prophetically-announced deliverer of God's people; (2) that the Logos-doctrine of St. John cannot be traced back to Milo; (3) that the marvelous (if not the strictly miraculous) cannot be eliminated from the records without utterly destroying them. Men are asking to-day not: Is there a God; but, What kind of a God is he who is involved in all thought and life; what is the character of the Will behind the universe? Theology

answers: Look at Jesus as he lives and breathes in the Gospel history, and you will find God; his reason and heart lie at the center of all things; in him you will discover the clew to the winding mazes of history, the baffling perplexities of thought, the dire mysteries of Nature. No doubt we have here rather a faith and a conviction than a reasoned and a demonstrated conclusion. But truth can afford to wait."

OTHER ARTICLES.

Katherine Wylde writes an interesting literary paper upon Dmitri Merejkovski, whose book, "The Resurrection of the Gods," has just been published in an English translation entitled "The Forerunner." She says:

"His books are historical novels, brilliant and varied pictures of early Christian and Renaissance times. They are also a setting forth of, an apology for, modern ideas."

Dr. E. J. Dillon writes on the foreign affairs of the month, with special reference to recent events in Spain, on which he gives a good deal of information which is not accessible to readers of the English newspapers.

THE FORTNIGHTLY REVIEW.

IN the August *Fortnightly*, Mr. Michael Macdonagh gossips very pleasantly through twenty-two pages on prime ministers and their appointment. The article is brightly written, and full of interesting reading. It contains a good many "chestnuts," but as an *aide-mémoire* it is handy and useful. Mr. Macdonagh recalls, for instance, the earlier style of the *Times*. A hundred years ago it roundly denied that the constitution recognized any such office as a prime minister's. He quotes Mr. Low, in the "Dictionary of National Biography," as the authority for the statement that the selection of Lord Rosebery as Mr. Gladstone's successor in 1893 was the act of the Queen alone. Sir Robert Peel, in 1845, declared that he did not advise the Queen as to the choice of his successor. "I offered no opinion," he said. "This is the only act which is the personal act of the sovereign. It is for the sovereign to determine in whom her confidence shall be placed." During Mr. Gladstone's premiership he created sixty-seven new peerages, called fourteen Scotch and Irish lords to the House of Lords, made seven promotions in the peerage, and created ninety-seven baronets.

THE FORESIGHT OF THE FUTURE.

Mr. Maeterlinck has an extremely interesting paper, in which he describes an investigation which he has recently made in Paris to see whether the astrologers, palmists, and all the soothsayers and diviners of the present time could foresee the future. He went to see all the most famous of the prophetesses, who, under the names of clairvoyants, seers, mediums, and all the rest, are the direct heiresses of the Pythonesses of old. He found much knavery, simulation, and gross lying, but he also found certain incontestable phenomena which convinced him that these psychics can see further than ourselves into our hearts, and are able often to make predictions which are at times astonishingly fulfilled. At the same time he found nothing conclusive, nothing decisive in his investigations, although he thinks it is almost incredible that we should not know the future. What success the psychic achieved he attributes entirely to the capacity to intrude into our own inner consciousness, to which our physical

consciousness can but seldom appear. Time to him is a mystery, arbitrarily divided into a past and future. "In itself it is almost certain that it is but an immense, eternal, motionless Present, in which all that takes place, and all that will take place, takes place immutably; in which To-morrow, save in the ephemeral mind of man, is indistinguishable from Yesterday or To-day." Man is separated from the future by the great infirmity of his mind, but nothing but the displacement of a cerebral lobe would be enough to make the future unfold itself before us with the same clearness as the past. "It is only by glimmers, by casual and passing infiltrations, that future years, of which he is full, of which the imperious realities surround him on every hand, penetrate to his brain."

ALSACE-LORRAINE AND WILLIAM II.

Dr. Karl Blind, writing upon the abolition of the dictatorship in Alsace-Lorraine, speaks cheerfully concerning the way in which the Alsatians are reconciling themselves to their German conquerors. Karl Blind, however, it must be admitted, is a somewhat prejudiced witness, as he admits he was one of the first to declare in favor of annexation. Blood and speech, he declares, assert themselves with ever-increasing strength, as the rising generation becomes better acquainted with the past of its race. The military system of Germany tends to Germanize the population, and a more popular system of government at Berlin would quicken the change with rapid pace.

THE RED CROSS DURING THE BOER WAR.

Mrs. Lecky writes an article entitled "Inter Arma Caritas," which describes the growth of the Red Cross societies, and at the close states some of the facts as to the way in which the British military authorities used their power to deprive the Boers of the rights and privileges supposed to be secured to them by the Geneva Convention. Among the many disgraceful chapters of the story one of the worst is that which describes how the British Government, under first one pretext and then another, either stole the ambulances which had been presented by the Red Cross societies to the Boers, or prevented the dispatch of ambulances for the relief of the wounded. Mrs. Lecky, being the wife of a Unionist member of Parliament, is very sparing in her adjectives; but she tells enough of the shameful story to enable those who read between the lines to understand that the British Government, in the adoption of the various methods of barbarism employed for the crushing of the Boer resistance, did not hesitate to trample under foot the provisions of the Red Cross Convention. There may be no article in the Convention of Geneva to appeal to, but, asks Mrs. Lecky, is it in accordance with its spirit that in a prolonged war one of the belligerents should be deprived of the beneficent aid of the Red Cross? It is to be hoped that at the congress which is to be held at Geneva this autumn the convention may be amended in such a way as to deprive any future government of the excuse of following the evil precedent of the British military authorities.

THE NEW FLYING SQUADRONS OF FRANCE.

Mr. Archibald S. Hurd calls attention to the latest development in French naval policy, which has been carried out by M. Lanessan. In each ocean the French Minister of Marine is placing a fleet which exceeds in power either of the squadrons maintained by Great Britain. Wherever either of the two French squadrons,

in the Atlantic or the Pacific, may appear during their periodical cruises, it is the French fleet and not a local and isolated British squadron which will be the supreme force.

OTHER ARTICLES.

Mr. Walter Sichel writes on "Some Phases in Fiction," and Mr. George Gissing supplies the second part of the "An Author at Grass," extracts from the unpublished papers of Henry Ryecroft.

THE NATIONAL REVIEW.

THE *National Review* for August has some good literary articles, notably Sir Leslie Stephen's paper on "Young's Night Thoughts" and Sir Rowland Blennerhassett's essay on Guizot.

Sir Horace Rumbold continues his recollections of a diplomatist; a writer signing himself "Telescope" expresses considerable doubt as to whether the use of the search-light in naval warfare is not calculated to assist the assailing torpedo-boat rather than the man-of-war, whose chief weapon of defence is her invisibility. In the attack of the Taku forts the Russians, who used the search-light, were struck many times, while the German and the British ships which bore the brunt escaped almost untouched.

A CHINESE PLAY.

Mrs. Alfred Lyttelton contributes a graceful little Chinese play in one act, entitled "A Tale of Two Feet." The *motif* is very simple. A Chinese girl, whose feet have not been crippled, is in love with a mandarin who, being a member of the Imperial house, is not permitted to marry any one whose feet have been compressed. The girl, not knowing this, feels certain that the moment he sees her large feet he will leave her, and therefore does her best to conceal them behind her petticoat. On the other hand, the mandarin mournfully admits that he can never marry her for exactly the opposite reason. They are just about to part forever when her foot peeps out for a moment in a dance. She is in despair, when her sorrow is turned into delight by being told that but for what she regarded as her shame the longed-for marriage could never have taken place.

THE BRITISH SEAMAN.

The Marquis of Graham, writing on "British Sailors and the Mercantile Marine," maintains that from the statistics of the port of Glasgow the British seaman, man for man, is more sober and more amenable to discipline than the foreign seaman who is largely supplanting him. He also asserts—that what is not generally believed—that there is no truth in the assertion that foreigners are cheaper to employ than men British born. The gradual dwindling of the British seaman is due to the disuse of the apprenticeship system. He suggests that a sound system compelling shipowners to carry apprentices should be established, in return for which subsidies should be paid to vessels capable of serving as auxiliary ships of war in case hostilities should break out.

THE WESTMINSTER REVIEW.

THE *Westminster Review* for August is a very interesting number, containing several thoughtful and suggestive articles. It opens with a paper on "Peace in South Africa," the gist of which is summed up in the sentence that "on paper we are the victors,

in fact we are the vanquished." It praises Lord Kitchener, who won his victory by his tact and by his imagination, and saved Great Britain from the curse of another Ireland in South Africa.

Mr. R. J. Sturdee examines the "Teaching of History of War," and maintains that the secret of England's greatness is that throughout her history she, of all the great nations, has been least at war. She worked out her own salvation by concentrating her attention more upon internal than upon external affairs.

There is a somewhat elaborate article entitled "The Imperfection of Protectionists' Arguments," which takes the form of a reply to Sir Vincent Caillard's papers in the *National Review*. The primary object of the writer is to demonstrate the inadmissibility of the bulk of statistical evidence used in discussing the merits or demerits of free trade or protection. The fiscal scheme advocated by Sir Vincent Caillard is absolutely illusory, and crumbles away under the test of analytical criticism as being self-destructive and self-contradictory.

Mr. N. C. Macnamara discusses "The Chemical Theory of Life." Mr. A. P. Sen writes an article repelling the theory that English education creates sedition in India. Mr. F. W. Muller writes on "The Essential Falsehood of Christian Science." Christian science is to him the apotheosis of nonsense. Mr. A. W. Wilcox, writing on "Insanity and Marriage," applauds the action of Florida and one or two other American States in making insanity a justification for divorce. He would also allow divorce in case of confirmed drunkenness.

Mr. J. A. Gibson writes a very pleasant paper on the delights of becoming possessed of a library in middle age after having been kept from spoiling the flavor of the best books by youthful and unappreciative reading.

THE MONTHLY REVIEW.

THE *Monthly Review* for August contains an elaborately illustrated paper upon Khartoum and its antiquities, by Mr. John Ward. A still more plentifully illustrated paper is devoted to the painters of Japan. It is the second part of Mr. Arthur Morrison's account of Japanese art and artists. The Hon. R. H. Brand replies to Mr. Kershaw's paper on the promotion of trade within the empire. He writes from the standpoint of an uncompromising free trader.

Mr. R. E. C. Long, in a paper on "Russia's Latest Venture in Central Asia," suggests the advisability of making a railway through Afghanistan for the purpose of connecting Russian Central Asian lines with the Indian railway system. He describes what has been done in the construction of the Orenburg-Tashkent line, which will tap the whole fertile valley of the Oxus, and provide direct intercommunication between Central Asia and Siberia. When the new line is completed Russian grain will be sent direct into Khanates, while the journey for Siberian products will be reduced by one-half, the goods being sent along the main line to Somali, and thence direct by Orenburg to Central Asia. The article would have been improved by a map.

Mr. Benjamin Taylor discusses the proposed junction of the Atlantic and Pacific by a canal across the Isthmus in an article entitled "The Wedding of the Oceans." The construction of such a canal would reduce distances in favor of the United States, but the change would in many instances produce a complete reversal of the advantage which British trade at present enjoys.

Algernon Cecil writes upon Lord Beaconsfield, and Lieut.-Col. Carlyon Bellairs has a second paper upon "The Navy and the Engineer." Mr. Henry Newbolt writes a poem, describing how, when "Terror's footfall in the darkness crushed the rose imperial of our delight,"

I saw the King of England, hale and fair,
Ride out with a great train through London Town.

THE EDINBURGH REVIEW.

THE most remarkable thing about the *Edinburgh Review* for July is that that number completes its hundredth year of publication. It is announced that the October issue will contain an article dealing with the whole history of the *Review*, together with some portraits.

The opening article of the present number deals with "The Decline and Fall of the Second French Empire," the results of the Mexican expedition being described in detail. An article on "War and Poetry" deals with English battle-poetry. The reviewer remarks upon the extraordinary absence of good poetry dealing with the recent war. The only poem produced by the war which is likely to live is, he says, one written by Mr. Henry Newbolt. But it is rather hard on poor Mr. Alfred Austin to contrast him with Lord Byron. The reviewer explains the absence of good poetry on the Boer war, partly by the fact that modern poets have always written better war-poetry when they were divided from their subject by time.

A CORNER OF THE TURKISH QUESTION.

There is a paper on the Albanian question, in which the reviewer revives an old suggestion for the formation of a joint Albano-Grecian state on the model of Sweden and Norway.

"The two states together, it is urged, could easily check the progress of the Slavs and keep them out of Macedonia, as in olden times Philip of Macedon, assisted by the Illyrians—the ancestors of the modern Albanians—succeeded in repelling the barbarians of the north. Greece would gain much from such an alliance. The Albanians are warriors born and bred. Their existence for centuries past has been a continuous fight—now against the Turks, now against the Slavs. When in want of foreign foes they keep themselves in training by their internal feuds. To Greece such allies would be invaluable. In return for this service the Albanians would profit by the Greek aptitude for a seafaring life. Their coast will be defended by the Greek fleet, and Greek enterprise would also develop the commercial possibilities of the country. Moreover, the civilization of the Greeks would enable Albania to lay the foundations of a national education and of a political organization. The idea, so far as it has been promulgated, seems to have met with a favorable reception among the 'brethren.' There is a strong racial affinity between the Greeks and the Albanians."

Even under present conditions the Greeks and Albanians readily assimilate, and a fifth of the population of the present kingdom of Greece is made up of Albanians. The Albanian is mentally not inferior to some of the best races of the West. He shows a marvelous susceptibility to civilization, and out of his own country easily adapts himself to the modes of more highly-cultured peoples.

OTHER ARTICLES.

There is a review of Mr. Colquhoun's book "The Mastery of the Pacific," a paper on the education bill, and another on Victor Hugo, in which the reviewer says that Hugo's great defect as a writer is that he cannot get rid of himself; in his dramas and his novels he cannot utterly lose himself in his creations.

THE QUARTERLY REVIEW.

THE chief feature in the *Quarterly Review* for July is Mr. Swinburne's appreciation of Charles Dickens, which is quoted at some length elsewhere. The number opens with a review of the books describing the tour of the Prince and Princess of Wales round the empire.

The writer of the article "The Romance of India" reviews Kipling's "Kim," Mrs. Steele's stories, etc., but the only point in the article that is worth quoting is the concluding passage, in which he hazards the speculation that some day it may be said that the translation of the sacred books of the East in the nineteenth century marked the beginning of a new intellectual era, as the translation of the Greek writers did in the fifteenth century. Who can tell that in some mud cottage in a hamlet on the plains or a shepherd's cottage in the hills there may not at this moment be lying a babe from whose mouth some day will proceed that which millions will for ages accept as part of their guidance in the difficult journey of life?

There is an article on James Russell Lowell. The writer, probably from temperament or from religious prejudice, is unable to do justice to the most important part of Lowell's writings. But he is not without appreciation of his descriptive work. Otherwise he would not have written:

"What Lowell more or less did in all his activities was to extricate the finer creed of his forefathers from its coarser and more obsolete surroundings, and to ap-

ply the sturdy sagacity and strong moral sense, the shrewd humor, and deep, if limited, feeling of the old Puritan to the problems of his day. These qualities, he held, would enable them to guide the inevitable democratic tendencies into the paths of downright honesty and sound common sense, and encounter the danger of political and social materialism that threatens the faith in plain living and high thinking."

There is a very interesting article concerning the depth of the sea, which deals with the inhabitants of the ocean depths which lie deeper than three hundred fathoms. It is an interesting subject, and it is handled in an interesting fashion. The fishes which inhabit those great depths are the only living creatures that inhabit a changeless world. Climate plays no part in their lives, seasons are unknown to them, and they experience no change of temperature. The ocean depths produce no vegetation, and yield no food save that which descends to them from above. In that cold, still, and noiseless world monotony reigns supreme. Some of the fish go blind, others develop huge eyes, while a third class carry their own lamps with them. Many of them have enormous jaws, and some are able to swallow fishes much larger than themselves. Altogether the article makes one thankful that we were not born in "the dark, the utter dark, where the blind white sea-snakes are."

There are several literary articles of more than usual note. In one the reviewer endeavors to revive the reputation of a forgotten poet, George Darley, who published his works between 1832 and 1841. Another literary article of great length and importance is an attempt to give a critical estimate of the value of the work of the Italian poets of to-day.

There is an article entitled "The Efficiency of the Services," which declares that it is impossible for England to rest content with a system which produces an uneducated army, an ill-prepared navy, and an inadequately informed foreign office.

THE CONTINENTAL REVIEWS.

REVUE DE PARIS.

OF the six historical articles in the *Revue de Paris* for July, the student will turn with most interest to the account of Rostopchine, the heroic Russian who is believed to have set fire to the town of Moscow rather than to let it fall into the hands of Napoleon and his legions.

The Napoleonic epoch provides the matter for three other articles. The first describes the elaborate arrangements, made in view of the elections of 1818, when the imprisoned Emperor was still adored in France, and when Louis XVIII. and his government ran every risk of seeing it proved to the world how little had been desired by the country the Restoration forced upon it. The second, entitled "Napoleon and the Popular Drama," shows how very important the great conqueror considered the amusement of the people. He always found time, even when actually engaged in a campaign, to concern himself with these kinds of matters; and by his special wish plays dealing with heroic episodes, of a nature to evoke the enthusiasm and patriotism of the spectators, soon took the place of the comedies of intrigue which had delighted the Parisians of the eighteenth century.

The letters of Mme. de Remusat, written between 1815 and 1817, though not directly concerned with Napoleon, give, of course, many amusing side-lights on the

Napoleonic era, especially of the kind of simple incidents laid in the provinces, and of the way in which the great events then shaking Europe were regarded by French provincials.

The centenary of Dumas Père has inspired M. Parigot to write a curious paper concerning Dumas' value as an historian. His latest critic claims that even if he concerned himself very little with historic accuracy, Dumas could certainly claim to have had an extraordinary degree of intuitive perception of ages other than his own. He possessed to a remarkable degree the power of reconstituting the mental atmosphere of an epoch. His heroes and heroines were intensely living creations—and this, whether they had had actual prototypes, or whether they were in very truth the children of his imagination.

NOUVELLE REVUE.

WE have noticed elsewhere M. Desmarest's curious and instructive article on "Inventors: Their Good and Evil Fortune." Of the political articles the first deals with "The Situation of Italy, especially in relation to Tripoli."

The French have always taken the keenest interest in the financial side of their colonial possessions. M. Paris contributes a short, but none the less valuable paper,

concerning what he styles "The Piastre Question in Indo-China." Indo-China has to deal with much the same problem as have the English administrators in India, and what the rupee has so long been to the Anglo-Indian, the piastre is to those officials whose fate it is to be closely connected with Indo-China.

Yet a third article dealing with "France's Colonial Empire" attempts to give a forecast of the economical future of Martinique. The writer, M. Dassier, denies that there is the slightest necessity for evacuating the island. Martinique is now in a very peculiar position. Any and every experiment may be tried, and M. Dassier evidently believes that French capitalists might do worse than turn their attention to this most fertile spot, especially with a view to financing coffee estates. The island has always been famous for the excellence of its coffee and of its cocoa. There, as elsewhere in the West Indies, the abolition of slavery put an end to the splendid prosperity of the island. There now seems to be an idea of importing Chinese labor, and it must be admitted that the Chinaman, alone of human beings, seems dowered with a practical fatalism which makes him strangely indifferent to what the future may bring him.

Two articles are devoted to Siam. The one by M. Savine describes at great length the character and nature of the Crown Prince of Siam, who is now visiting Europe; while the other is ominously entitled "Siam: the Coming Conflict."

Other articles deal with the Piedmont insurrection of 1799, a scientific mission undertaken by Dumas Père, "The French Theatrical Financial Crisis," and an amusing biographical sketch of the great Napoleon's somewhat foolish brother, Lucien.

LA REVUE.

M. CHÉRET writes with warm admiration in *La Revue* for July of the widely read and most influential Polish novelist and journalist, Alexandre Glowacki. Here, at any rate, is a modern writer, after reading whom we do not feel as if we "had been eating soap." Glowacki is far better known as "Bolesaw Prus." It is enough, says M. Chéret, to say these two words to a Pole for a broad smile to light up his face. He smiles first because he is devoted to Glowacki, and secondly because he remembers the genial Dickensian humor of his many and widely read works—some fifteen or sixteen volumes. Glowacki's message to his countrymen is that this their light affliction endures only for a moment; it is but such as all great peoples must endure. It will not permanently affect their destinies. As for the eventual independence of Poland, Glowacki seems to consider it too obvious to be discussed. Besides writing tales and novels, he is a journalist of great distinction; and contributes to one of the most widely circulated Polish papers a brilliantly clever weekly *chronique*. In his understanding of human nature and delicacy of humor, M. Chéret would place Glowacki before Dickens. Unlike Gorky and Tchekhoff, he seeks for goodness and kindness in life. Following this article is a translation of one of his stories, "The Spy."

THE PROGRESS OF SPELLING REFORM IN FRANCE.

M. Renard, writing on spelling reform, says that delegates from the Higher Board of Education in France

and the French Academy are shortly to examine a project of spelling reform, supported by several well-known men of letters and grammarians. The chief points to be discussed are: (1) Frenchifying foreign words in common use; (2) unifying spelling; (3) simplifying double consonants, ph, th, etc.; (4) getting rid of double consonants.

THE DUTCH MAGAZINES.

THE most interesting article of the usual three contained in the current issue of *Vragen des Tijds* is that on "Insurance Against Being Out of Work," with special reference to what is being done in Ghent. This new form of insurance arose out of an exceptional crisis; and an attempt of this kind was made in Rotterdam some years ago, but was not successful, owing to difficulties and differences of opinion in the way of helping the unemployed. In certain towns in Switzerland an arrangement of this nature is in force; but in Ghent the idea has been carried out in a manner that appears to be satisfactory, and there is very little fear that the subsidy given to workmen's unions will lead to the demoralization of those assisted. The writer enters into details, and the complete article is worth reading by labor leaders and others interested in the question of the unemployed. The other articles are a learned dissertation on "Penal Law and Criminal Anthropology," and some remarks on "Letters of Multatuli and Huet."

De Gids opens with a novel by Augusta de Wit, "The Goddess Who Watches," to give a literal translation of the title. It is good reading. This is followed by an article on Mr. Hall as a minister, which will be chiefly interesting to those only who are associated with, or follow intimately, the political circumstances of Holland. The next article, according to a footnote, is rendered less interesting by the conclusion of peace in South Africa; it discusses the "Boer Movement" in America, and gives reasons why Americans should be and are in favor of the Boers. "In no other country," says the writer, "is the will of the people more powerful;" and the will of the people in this instance, in his opinion, is in favor of freedom. The President and the Secretary of State are friends of the Boers because they are lovers of freedom. Dr. Singel's observations on old-time traveling are pleasant and amusing reading, but there is not a great deal that is new to be said on the subject. Dr. Nieuwenhuis tells us of the increase of Dutch influence in Borneo; he describes the progress made with the tribes extending to Sarawak and elsewhere, and shows that the influence of Holland is certainly extending.

In *Elsevier* we turn at once to the article on Japanese printing, with its reproductions of pictures to be found on Japanese decorative papers and the like. A separate portrait of Professor Rosenstein, and a glowing sketch of the celebrated scholar, together with the customary character sketch of an artist of note, a short story, and other features make up an average number.

Woord en Beeld contains an illustrated description of the exhibition of ancient art,—pictures, clocks, plate, etc.,—at Deventer; a portrait and sketch of the career of J. C. van Marken, well known in industrial circles; a story, music, and pictures.

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Abbreviations of Magazine Titles used in the Index.

[All the articles in the leading reviews are indexed, but only the more important articles in the other magazines.]

Ains.	Ainslee's Magazine, N. Y.	Edin.	Edinburgh Review, London.	NEng.	New England Magazine, Boston.
ACQR.	American Catholic Quarterly Review, Phila.	Ed.	Education, Boston.	NineC.	Nineteenth Century, London.
AHR.	American Historical Review, N. Y.	EdR.	Educational Review, N. Y.	NAR.	North American Review, N. Y.
AJS.	American Journal of Sociology, Chicago.	Eng.	Engineering Magazine, N. Y.	Nou.	Nouvelle Revue, Paris.
AJT.	American Journal of Theology, Chicago.	Era.	Era, Philadelphia.	NA.	Nuova Antologia, Rome
ALR.	American Law Review, St. Louis.	EM.	España Moderna, Madrid.	OC.	Open Court, Chicago.
AMonM.	American Monthly Magazine, Washington, D. C.	Ev.	Everybody's Magazine, N. Y.	O.	Outing, N. Y.
AMRR.	American Monthly Review of Reviews, N. Y.	Fort.	Fortnightly Review, London.	Out.	Outlook, N. Y.
ANat.	American Naturalist, Boston.	Forum.	Forum, N. Y.	OutW.	Out West, Los Angeles, Cal.
AngA.	Anglo-American Magazine, N. Y.	Frl.	Frank Leslie's Monthly, N. Y.	Over.	Overland Monthly, San Francisco.
Annals.	Annals of the American Academy of Pol. and Soc. Science, Phila.	Gent.	Gentleman's Magazine, London.	PMM.	Pall Mall Magazine, London.
Arch.	Architectural Record, N. Y.	GBag.	Green Bag, Boston.	Pear.	Pearson's Magazine, N. Y.
Arena.	Arena, N. Y.	Gunt.	Gunter's Magazine, N. Y.	Phil.	Philosophical Review, N. Y.
AA.	Art Amateur, N. Y.	Harp.	Harper's Magazine, N. Y.	PhoT.	Photographic Times-Bulletin, N. Y.
AL.	Art Interchange, N. Y.	Hart.	Hartford Seminary Record, Hartford, Conn.	PL.	Poet-Lore, Boston.
AJ.	Art Journal, London.	Hom.	Homiletic Review, N. Y.	PSQ.	Political Science Quarterly, Boston.
Atlant.	Atlantic Monthly, Boston.	IJE.	International Journal of Ethics, Phila.	PopA.	Popular Astronomy, Northfield, Minn.
Bad.	Badminton, London.	Int.	International Quarterly, Burlington, Vt.	PopS.	Popular Science Monthly, N. Y.
BankL.	Bankers' Magazine, London.	IntS.	International Studio, N. Y.	PRR.	Presbyterian and Reformed Review, Phila.
BankNY.	Bankers' Magazine, N. Y.	JMSI.	Journal of the Military Service Institution, Governor's Island, N. Y. H.	PQ.	Presbyterian Quarterly, Charlotte, N. C.
Bib.	Biblical World, Chicago.	JPEcon.	Journal of Political Economy, Chicago.	QJEcon.	Quarterly Journal of Economics, Boston.
BibS.	Bibliotheca Sacra, Oberlin, O.	Kind.	Kindergarten Magazine, Chicago.	QR.	Quarterly Review, London.
BU.	Bibliothèque Universelle, Lausanne.	KindR.	Kindergarten Review, Springfield, Mass.	RasN.	Rassegna Nazionale, Florence.
Black.	Blackwood's Magazine, Edinburgh.	LHJ.	Ladies' Home Journal, Phila.	RefS.	Réforme Sociale, Paris.
BB.	Book Buyer, N. Y.	LeisH.	Leisure Hour, London.	RRL.	Review of Reviews, London.
Bkman.	Bookman, N. Y.	Lipp.	Lippincott's Magazine, Phila.	RRM.	Review of Reviews, Melbourne.
BP.	Brush and Pencil, Chicago.	LQ.	London Quarterly Review, London.	Revue.	Revue, La, Paris.
CDR.	Camera and Dark Room, N. Y.	Long.	Longman's Magazine, London.	RDM.	Revue des Deux Mondes, Paris.
Can.	Canadian Magazine, Toronto.	Luth.	Lutheran Quarterly, Gettysburg, Pa.	RGen.	Revue Générale, Brussels.
Cass.	Cassell's Magazine, London.	McCl.	McClure's Magazine, N. Y.	RPar.	Revue de Paris, Paris.
CasM.	Cassier's Magazine, N. Y.	Mac.	Macmillan's Magazine, London.	RPP.	Revue Politique et Parlementaire, Paris.
Cath.	Catholic World, N. Y.	MA.	Magazine of Art, London.	RSoc.	Revue Socialiste, Paris.
Cent.	Century Magazine, N. Y.	MRN.	Methodist Review, Nashville.	Ros.	Rosary, Somerset, Ohio.
Cham.	Chambers' Journal, Edinburgh.	MRNY.	Methodist Review, N. Y.	San.	Sanitarian, N. Y.
Chaut.	Chautauquan, Cleveland, O.	Mind.	Mind, N. Y.	School.	School Review, Chicago.
Contem.	Contemporary Review, London.	MisH.	Missionary Herald, Boston.	Scrib.	Scribner's Magazine, N. Y.
Corn.	Cornhill, London.	MisR.	Missionary Review, N. Y.	SH.	Seaview Review, N. Y.
Cos.	Cosmopolitan, N. Y.	Mon.	Monist, Chicago.	SocS.	Social Service, N. Y.
CLA.	Country Life in America, N. Y.	MonR.	Monthly Review, London.	Str.	Strand Magazine, London.
Crit.	Critic, N. Y.	MunA.	Municipal Affairs, N. Y.	Temp.	Temple Bar, London.
Deut.	Deutsche Revue, Stuttgart.	Mun.	Munsey's Magazine, N. Y.	USM.	United Service Magazine, London.
Dial.	Dial, Chicago.	Mus.	Music, Chicago.	West.	Westminster Review, London.
Dub.	Dublin Review, Dublin.	NatGM.	National Geographic Magazine, Washington, D. C.	WPM.	Wilson's Photographic Magazine, N. Y.
		NatM.	National Magazine, Boston.	WW.	World's Work, N. Y.
		NatR.	National Review, London.	Yale.	Yale Review, New Haven.
		NC.	New-Church Review, Boston.	YM.	Young Man, London.
				YW.	Young Woman, London.